2010 Cancer Incidence and Mortality in North Carolina

State Center for Health Statistics

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Introduction

Cancer is a group of diseases in which there is an uncontrolled growth of abnormal cells in a part of the body. One out of every two men and one out of every three women in the United States will develop cancer during their lifetimes.[1] In 2010, cancer was the leading cause of death in North Carolina.[2] In order to determine the effect cancer has on the state's population, the North Carolina Central Cancer Registry (CCR) collects, compiles and tabulates data regarding the occurrence of cancer and reports the deaths due to cancer within the state. This report is a summary of the incidence and mortality due to cancer with the most complete and recent data the CCR has available.

Background

The CCR, located in the State Center for Health Statistics (SCHS), was established in 1986. The CCR operates under the authority granted in North Carolina General Statute 130A-208.[3] Legislation declaring cancer reporting to be mandatory in North Carolina became effective in 1947. Authorized funding for establishing a registry, however, was not appropriated until 1986. Between 1986 and 1989, only 50-60 percent of the cases were reported each year. The first year for which relatively complete statewide reporting was achieved was 1990. In 1999, new legislation was passed that requires every healthcare provider that detects, diagnoses or treats cancer cases to report all cases to the CCR.[3]

On a national level, the CCR reports data to the North American Association of Central Cancer Registries (NAACCR)[4] and the Centers for Disease Control and Prevention National Program of Cancer Registries (NPCR).[5] Both organizations annually review the data the CCR submits for its completeness, quality and timeliness. Completeness is the percentage of cases reported. Having high quality data ensures that there are not duplicate records per case and that certain data variables are accurate and complete. In order to meet the timeliness requirement, the data must be submitted within 23 months of the completion of the diagnosis year under review. For the last four years, the CCR has achieved the NAACCR Gold Standard for Registry Certification. This certification is the highest NAACCR standard awarded for completeness, quality and timeliness of data. The CCR continues to meet the requirements for NPCR in order to receive funding and to have data publicized nationally.

Purpose

As a population-based registry, the CCR collects, analyzes and disseminates information on the occurrence of cancer in North Carolina. The data collected include patient demographics (e.g., race, gender and age) and medical information on each cancer diagnosis (e.g., primary site, morphology, stage and first course of treatment). This information is used to improve cancer treatment and identify groups that have higher incidence and mortality from cancer.[6] The CCR preserves the confidentiality of information obtained for medical, educational, research and statistical purposes. No identifying information regarding patients, hospitals or physicians is released except under the conditions specified in General Statute and North Carolina Administrative Code.[3]

2010 Cancer Incidence and Mortality in North Carolina is the 17th annual report of the CCR. The contents of this report represent a summary of the information collected on cancer diagnoses and deaths in 2010. The information includes incidence and mortality counts and rates for all

cancers by county, race, gender and age. The primary goal of this report is to provide cancer data to healthcare planners, researchers and the general public.

Data Sources and Collection

Healthcare providers who detect, diagnose and treat cancer report cases to the CCR. The CCR receives data on death due to cancer from the Vital Records (VR) Unit, also located in the SCHS. The data are coded according to standard procedures and guidelines.

Cancer Incidence

Cancer incidence is the number of newly diagnosed cancer cases, not including recurrences, during a particular time period within a certain population. With each cancer diagnosis or treatment, the healthcare providers report the case to the CCR within six months. The CCR releases data approximately two years after the end of the diagnosis year, due to reporting delay, consolidation of records and cleaning of files.

From each case, the CCR collects patient demographics and medical information on the cancer diagnosis. Some demographics the CCR receives regarding an individual diagnosed with cancer include race, ethnicity, gender, age and residence. In addition, the CCR gathers data such as the first location of the cancer (primary site), the form of cancer (morphology), tumor size and the spread of the cancer (stage). Data regarding first course of treatment and vital status are also collected.

The CCR receives the majority of the cancer incidence data from healthcare facilities (hospitals, cancer centers, dermatology centers, urology centers and surgical oncology centers). Incidence data also come from physician offices, pathology reports, interstate data exchange, nursing facilities and death clearance cases. There are 120 hospitals which routinely diagnose and treat cancer patients. Of these, 70 have tumor registries where the data are abstracted and submitted to the CCR. There are around 90 physician offices and clinics in North Carolina that report to the CCR. Death clearance cases are cancers reported in death certificates that were previously unreported cancer cases. The CCR received over 67,000 reports from approximately 210 facilities in 2010.

Cancer Mortality

Cancer mortality is the number of deaths due to cancer during a specified time period within a certain population. Death certificates are filed to a county health director within five days. The death certificate is then passed on to VR on the fifth day of the following month.[3]

Once a year, VR provides the CCR with data on the deceased whose primary cause of death is cancer. This information includes demographics on the deceased including race, ethnicity, gender, age and residence. In addition to demographics, a primary cause of death and date of death are also collected.

Differences in Collecting Incidence and Mortality

For many studies, the CCR examines both incidence and mortality. Therefore, it is important to note differences in obtaining incidence data and mortality data. These differences include, but are not limited to, timeliness in reporting (both in state and out-of-state cases) and case finding.

There is a difference in the timeliness of reporting incidence and mortality data of cases reported in the state for North Carolina residents. For incidence data, the healthcare facility is supposed to report the case to the CCR within six months. However, with mortality data, a report of each death is submitted to the VR within two months.

Some people living near neighboring states go outside North Carolina for health care. Also, people may get diagnosed with or die of cancer outside of the state. North Carolina has an exchange agreement for cancer incidence data with 25 states and Washington, D.C., including its border states of Virginia, Tennessee and South Carolina. In addition, North Carolina has an exchange agreement with the other 49 states, as well as with Washington, D.C., and United States territories, for exchanging death certificates. Typically, incidence data are exchanged twice a year while mortality data, monitored by the National Center for Health Statistics (NCHS), are exchanged between states within two months of a death. However, even with these exchange agreements in place, delays or omissions can occur in the interchange of incidence and mortality records.

Although new cancer cases are required by law to be reported to the CCR, there are many that are not. Cases diagnosed in small hospitals that do not have a cancer registry may be under reported. Physicians associated with a large hospital will often report cases via a hospital registrar, but those not affiliated with a hospital may not have ample staff to report cases to the CCR. In the last few years, more cases are being diagnosed and treated in physician offices or surgical oncology centers and may never be referred to an oncologist nor be reported. The CCR has improved the completeness of reporting by recruiting physician offices and pathology laboratories as well as sending staff to smaller facilities to collect the required data. Despite the efforts of the CCR, incidence data are considered to be incomplete. On the other hand, death data are regarded as complete. Therefore, there may appear to be an excess of deaths compared to the number of cases for some cancers in rural counties.

Cancer Classification

The CCR receives an abstract of each medical record from a reporting facility. Each abstract contains specific medical information about the cancer. The cancers are categorized using codes according to the *International Classification of Diseases for Oncology, Third Edition.*[7] Each code is comprised of two pieces: topography and morphology. The topography code tells where the tumor began (primary site). The morphology code tells the type of cell (histology), the way it behaves within the body (behavior) and supplementary information about the tumor (grade). Care must be taken when coding lymphomas and leukemia.

The medical record also contains data regarding the cancer stage. The stage at diagnosis indicates how far the cancer has spread when it is first diagnosed. Knowing the extent of the cancer is important in treatment and prognosis. The CCR commonly uses National Cancer Institute's Surveillance, Epidemiology and End Results Program[8] definitions for staging and groups cancers as in situ, local, regional, distant and unknown.

In the data collected by the CCR, only malignant tumors are included with one exception. Data on benign brain and central nervous system tumors are also reported to the CCR. Only malignant tumors are included in this report. In situ cases are generally reportable to the CCR. However,

these tumors, with the exception of in situ breast and bladder cases, are not used in cancer surveillance nor in cancer incidence statistics. Data on basal and squamous cell skin cancers are not collected by the CCR unless they have spread to tissue beyond the original site. Malignant melanoma may occur at many different body sites; however, this report focuses on melanoma of the skin.

Statistical Methods

Populations not only vary in size, but also in their racial, gender and age breakups. Thus, the counts of cancer incidence and mortality have limitations when comparisons are needed.

Rates are used to show the risk of an event occurring in a population and the CCR presents rates per 100,000 persons. The CCR calculates rates for both incidence and mortality data. A crude rate is found by dividing the number of events (e.g., cancer cases or deaths) for a population of interest in a specified time period by the population of interest at risk during the same time period. This ratio is then multiplied by 100,000 to express it as a rate per 100,000 persons. A crude rate can be expressed as

$$crude\ rate = \frac{count\ of\ events\ for\ a\ population\ of\ interest}{population\ of\ interest\ at\ risk} \times 100{,}000.$$

Crude incidence and mortality rates for 2010 used the population estimates obtained from the NCHS. Incidence reports published by the CCR prior to 2006 were calculated using the State Demographer's population estimates. Hence, rates from reports prior to 2006 are not comparable to rates in this report.

Age-Specific Rates

An age-specific rate is an example of a crude rate where the population of interest is a specific age group. For age group *i*, an age-specific rate can be calculated as

$$age\text{-}specific\ rate_i = \frac{count\ of\ events\ for\ age\ group_i}{population\ of\ age\ group_i} \times 100{,}000.$$

A typical way to divide age groups is in five year increments (0-4, 5-9, …, 80-84, 85+). In this report, the ages are grouped as 0 to 19 (pediatrics), 20 to 44 (young adults), 45 to 64 (middle-aged adults) and 65 and older (senior adults).

Age-specific rates are used to examine the burden cancer has on a particular age group and to determine the need for services for a given population. In addition, they can be used to compare different population groups of the same age and notice the effect that cancer has on the various populations. Within a population, age-specific rates can be used to examine how cancer burden differs between age groups.

Age-Adjusted Rates

The occurrence of an event may vary with age, and the age structure of a population can vary as well. Therefore, age-specific rates are not always useful for comparisons and as a result must be adjusted to account for these differences. An age-adjusted rate is a weighted average of the age-specific rates expressed as a rate per 100,000 persons. Age-adjusted rates should be used only if

the same standard population is used for computing weights. The standard population provides the proportion of the population in specific age groups and includes information regarding age, but not race, sex or geographic location. The standard population the CCR uses is the 2000 United States Census population.

To calculate age-adjusted rates, multiply each age-specific rate by the proportion of individuals in that age group in the standard population. For example, for age group *i,*

$$weighted\ rate_i = age\text{-}specific\ rate_i \times \frac{standard\ population\ in\ age\ group_i}{total\ standard\ population}.$$

The age-adjusted rate is the sum of all the weighted age-specific rates. For *n* age groups the age adjusted rate is

$$age\text{-}adjusted\ rate = weighted\ rate_1 + weighted\ rate_2 + \cdots + weighted\ rate_n.$$

An age-adjusted rate allows comparison between populations of different age groups, time periods and/or geographic areas. Age-adjusting ensures that discrepancies in rates of various populations are not a result of differences in age distributions.

Gender-Specific Rates

In addition to computing rates by age, rates can be computed by gender. For both incidence and mortality, gender data are collected by the CCR and VR, respectively. Gender-specific rates are used for comparison between different population groups of the same gender and to examine how cancer tendencies differ between males and females. Gender-specific rates are also used when calculating rates that only affect males (e.g., prostate and testes) or females (e.g., ovary and cervix).

Race-Specific Rates

Rates can also be calculated by race. Race-specific rates are used for comparison between different population groups of the race and to examine how the cancer burden varies between racial groups.

Both race and Hispanic ethnicity are collected by the CCR. Race information can be classified as one of the following: white, black, Asian/Pacific Islander, American Indian and other. Although the CCR has five race fields to account for people who are multi-racial, only the primary race is used. Often the CCR reports rates for whites and minorities. Minorities are defined to be blacks, Asian/Pacific Islanders, American Indians and others. To assist in identifying Hispanic ethnicity, the CCR uses the NAACCR Hispanic Identification Algorithm (NHIA). This algorithm uses name, birthplace, gender and race to determine Hispanic ethnicity.[9] Thus, the CCR can report rates on white non-Hispanics, black non-Hispanics, other races non-Hispanics and Hispanics.

Reliability of Rates

Precautions should always be taken when comparing rates. Rates are not a measure of actual risk. They are used to compare cancer burden between time periods, age groups, gender groups and racial groups. Both the size of the numbers and the characteristics of the population are important indicators of the real value of the rate. Rates based on a small number of cases or for sparsely populated geographic areas should be viewed with caution. Small fluctuations can lead

to drastic changes. Therefore, sometimes it is more appropriate to look at the number of cases instead of the rates. When the number of events is small, multiple-year summary rates will provide a much better measurement of risk. Expanding the period of time studied enlarges the absolute numbers and adds more credence to a statement regarding a rate.[10]

Limitations of Data

When comparing rates between two populations, the user should note that age structure is the only difference between the populations for which rates have been adjusted. Since county demographics can vary considerably, one needs to be careful not to misinterpret rates. Racial composition, for example, can have a marked influence on the patterns of cancer incidence and mortality. Under-reporting, due to out of state cases or poor case-finding in some non-hospital situations, also needs to be taken into account when making comparisons of cancer data.

Summary of 2010 Cancer Data

The CCR collected approximately 49,340 cases of newly diagnosed cancers and 18,013 deaths due to cancer in 2010 (Table 1). Female breast, prostate, lung and bronchus, and colon and rectum cancers were the leading diagnosed cancers among all gender and races combined. The CCR often refers to these as the top four cancers (Table 2).

Cancer risk is strongly associated with lifestyle and behavior. Dietary patterns, alcohol use, and sexual and reproductive behaviors, which vary by demographic groups, are risk factors of cancer. Cancer is diagnosed more often among older North Carolinians. In general, males have a higher burden of cancer compared with females. Overall, non-Hispanic blacks and non-Hispanic whites had the highest incidence and mortality rates when compared with non-Hispanic other races and Hispanics. Lung and bronchus cancer was the most common cause of death due to cancer.

Age

More adults are directly affected by cancer than children. Senior adults (ages 65 and older) made up less than 13 percent of the population in 2010,[11] but accounted for over 50 percent of newly diagnosed cancer cases and two-thirds of deaths due to cancer. Children (ages 0 to 19) were the second largest age group, but made up less than 1 percent of both newly diagnosed cancers and deaths due to cancer (Chart 1). In 2010, the median age at which cancer was diagnosed was 65, but the ages ranged from 0 to 104. People who died of cancer also ranged in age from 0 to 104 with the median age being 71. The median age of incidence and mortality for each age group as well as the percentage of cases and deaths the top four cancers comprise are shown. In both middle-aged and senior adults, the top four cancers combined accounted for over half of the cancer cases and cancer deaths (Chart 2).

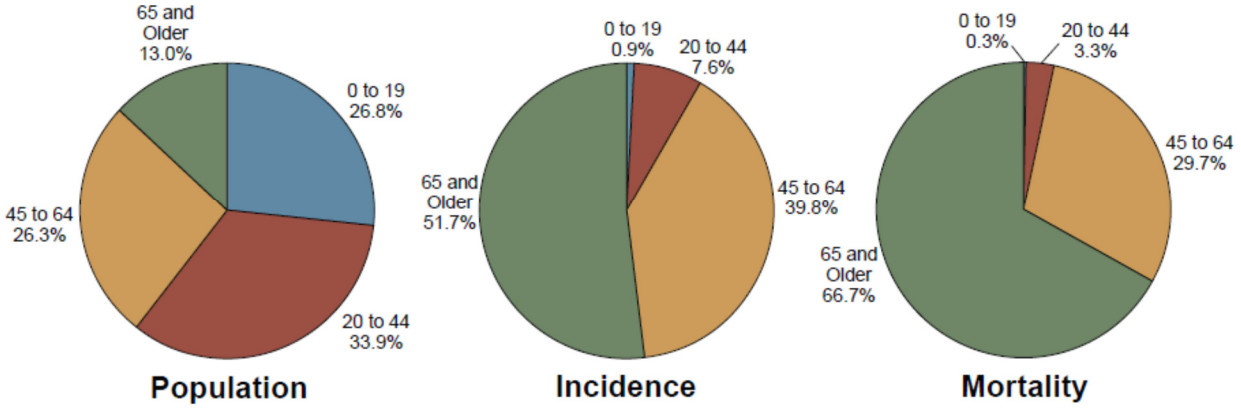
Children had a very different pattern of cancer than adults. Leukemia, brain cancer, endocrine cancer and lymphomas accounted for over 56 percent of cancers diagnosed in people under age 20. Leukemia, brain, endocrine and bone cancers made up over 84 percent of pediatric cancer deaths (Tables 5 and 6).

Young adults (ages 20 to 44) had a different pattern of cancer than children. In this age group, there was a greater incidence of female breast, cervical, uterine and prostate cancers than in the pediatric age group. On the other hand, the proportion of leukemia, bone, brain and liver cancers

was lower. Female breast cancer accounted for over 16 percent of all cancer deaths and had the highest mortality rate within this age group. The mortality rate for female breast cancer was more than 2.5 times higher than the next highest cancer rate, colon and rectum (Tables 5 and 6).

Cancer patterns were different in middle-aged adults (ages 45 to 64) compared with young adults. In this age group, there was a higher frequency of prostate cancer. The percentage of testicular cancer and Hodgkin disease was lower. In addition, the number of deaths due to Hodgkin disease and bone cancers was less. The frequency of prostate cancer deaths was higher for middle-aged adults than young adults (Tables 5 and 6).

Chart 1: 2010 Percentages of N.C. Population, Cancer Incidence and Mortality by Age



In senior adults, cancer patterns were similar to middle-aged adults. The incidence of testicular cancer continued to be lower than middle-aged adults. Lung and bronchus cancer accounted for more deaths in this age group than colon and rectum, female breast and prostate cancers combined (Tables 5 and 6).

Chart 2: 2010 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Age Group

	Incidence		Mortality	
	Median Age	**Top Four Sites**	**Median Age**	**Top Four Sites**
Children (ages 0-19)	10	3.5%	10	3.9%
Young Adults (ages 20 to 44)	39	35.8%	39	38.4%
Middle-Aged Adults (ages 45 to 64)	57	55.9%	58	50.8%
Senior Adults (ages 65 and older)	74	55.5%	77	52.3%

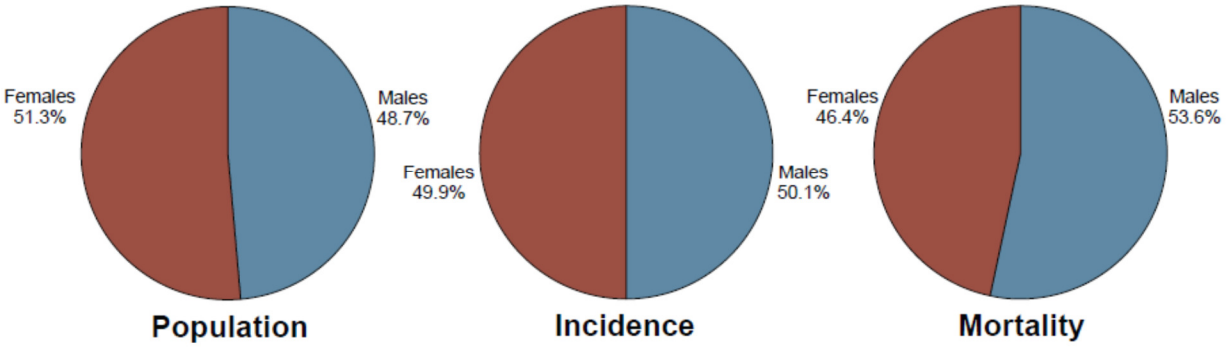
Gender

In 2010, slightly more than 50 percent of the state population was female. However, slightly more than half of all cancer cases were diagnosed in males and a little more than half of deaths due to cancer were in males (Chart 3). The median age of diagnosis for females was slightly less than males, but the median age of mortality was slightly greater for females. The top four sites comprised more than half of both cancer incidence and mortality among males and females (Chart 4).

The most frequently occurring cancers among males were prostate, lung and bronchus, colon and rectum, bladder, and melanoma. Lung and bronchus, prostate, colon and rectum, pancreatic and leukemia were the leading causes of death due to cancer (Table 8).

Among females, the most frequently occurring cancers were breast, lung and bronchus, colon and rectum, uterine, and endocrine. Lung and bronchus, breast, colon and rectum, pancreatic, and ovarian were the leading causes of death due to cancer (Table 8).

Chart 3: 2010 Percentages of N.C. Population, Cancer Incidence and Mortality by Gender



Differences between genders could provide clues to factors involved in the development of cancer. Esophageal, laryngeal, bladder, liver and oral cavity cancers had a higher frequency among males compared with females. However, females had a higher frequency of endocrine cancer compared with males. In males, one third of deaths due to cancer came from lung and bronchus cancer, whereas in females, lung and bronchus cancer constituted one quarter of cancer deaths (Table 7).

Chart 4: 2010 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Gender

	Incidence		Mortality	
	Median Age	**Top Four Sites**	**Median Age**	**Top Four Sites**
Males	66	51.9%	70	51.4%
Females	64	55.4%	71	51.1%

Race and Ethnicity

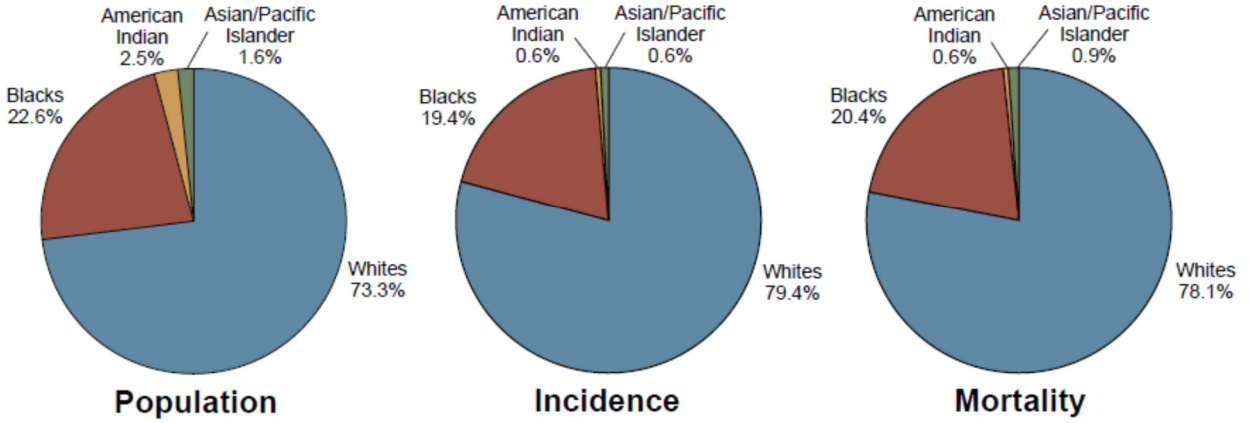
In 2010, almost 75 percent of the North Carolina population was white. Blacks comprised more than one-fifth of the population. Almost 80 percent of cancer cases and more than three-fourths of cancer deaths occurred in whites while almost 20 percent occurred in blacks (Chart 5). The median age and the percentage the top four cancer sites comprise among all cancers for both incidence and mortality are displayed for all racial ethnic groups (Chart 6). Hispanics were diagnosed with cancer at an earlier age than the other racial groups. Non-Hispanic other races had the youngest median age of mortality. Approximately 60 percent of cancer diagnosed in non-Hispanic blacks were from the top four sites.

For non-Hispanic whites, besides the top four cancers, melanoma was the next most frequently diagnosed cancer. Pancreatic cancer was a leading cause of death due to cancer in this group.

The number of lung and bronchus cancer deaths was almost 1.7 times as large as the number of deaths due to female breast, colon and rectum, and prostate cancers combined (Table 14).

Among non-Hispanic blacks, prostate cancer comprised approximately 18 percent of all diagnosed cancers. Uterine cancer was also among the top five frequently diagnosed cancers for this group. Pancreatic cancer was the next leading cause of death due to cancer after the top four cancers. The number of lung and bronchus cancer deaths was almost the same as the number of deaths due to female breast, colon and rectum, and prostate cancers combined (Table 14).

Chart 5: 2010 Percentages of N.C. Population, Cancer Incidence and Mortality by Race



For non-Hispanic other races, besides the top four cancers, uterine cancer was another commonly diagnosed cancer. Liver was the fourth leading cause of death due to cancer in this group (Table 14).

For Hispanics, outside of the top four cancers, endocrine was the most frequently diagnosed cancer. Lung and bronchus cancer constituted almost one-fifth of cancer deaths. For other racial and ethnic groups, lung and bronchus cancers made up over a quarter of cancer deaths. In Hispanics, pancreatic cancer was the fifth leading cause of death due to cancer (Table 14).

Chart 6: 2010 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Race and Ethnicity

	Incidence		Mortality	
	Median Age	**Top Four Sites**	**Median Age**	**Top Four Sites**
Non-Hispanic Whites	66	52.4%	72	50.7%
Non-Hispanic Blacks	62	60.1%	67	54.2%
Non-Hispanic Other Races	61	51.6%	64	47.6%
Hispanics	52	42.2%	65	41.3%

Conclusion

This descriptive report is intended to serve as a reference on cancer incidence and mortality for healthcare planners, researchers and the general public. This publication should not be regarded as a definitive description of the cancer incidence in North Carolina. Although there are important limitations in the use of these data, the observed number of cases and the calculated

rates within a county, a gender group, a racial and ethnic group or an age group have many uses. These uses include planning and evaluating health services at the county and state level and identifying cancer disparities between specific groups. The data provided by the CCR can be used by the Comprehensive Cancer Program in the Division of Public Health and other research organizations for prevention, detection and treatment of cancer.

The editor would like to thank Ann Farmer, Christian Klaus, Karen Knight, Sandy Overton, Chandrika Rao and the other members of the CCR staff for their contributions to this report.

Available Cancer Information

North Carolina Central Cancer Registry
www.schs.state.nc.us/SCHS/CCR 919-715-4574

North Carolina State Center for Health Statistics
www.schs.state.nc.us/schs 919-733-4728

North Carolina Breast and Cervical Cancer Control Progam
http://bcccp.ncdhhs.gov 919-707-5300

North Carolina CCR Rapid Case Ascertainment
http://unclineberger.org/rapid-case-ascertainment 919-966-0032

American Cancer Society
www.cancer.org 1-800-ACS-2345

National Cancer Institute
www.cancer.gov 1-800-4-CANCER

Surveillance Epidemiology and End Results
http://seer.cancer.gov

Cancer Control P.L.A.N.E.T.
http://cancercontrolplanet.cancer.gov

NCI State Cancer Profiles
http://statecancerprofiles.cancer.gov

National Program of Cancer Registries
www.cdc.gov/cancer/NPCR

North American Association of Central Cancer Registries
www.naaccr.org

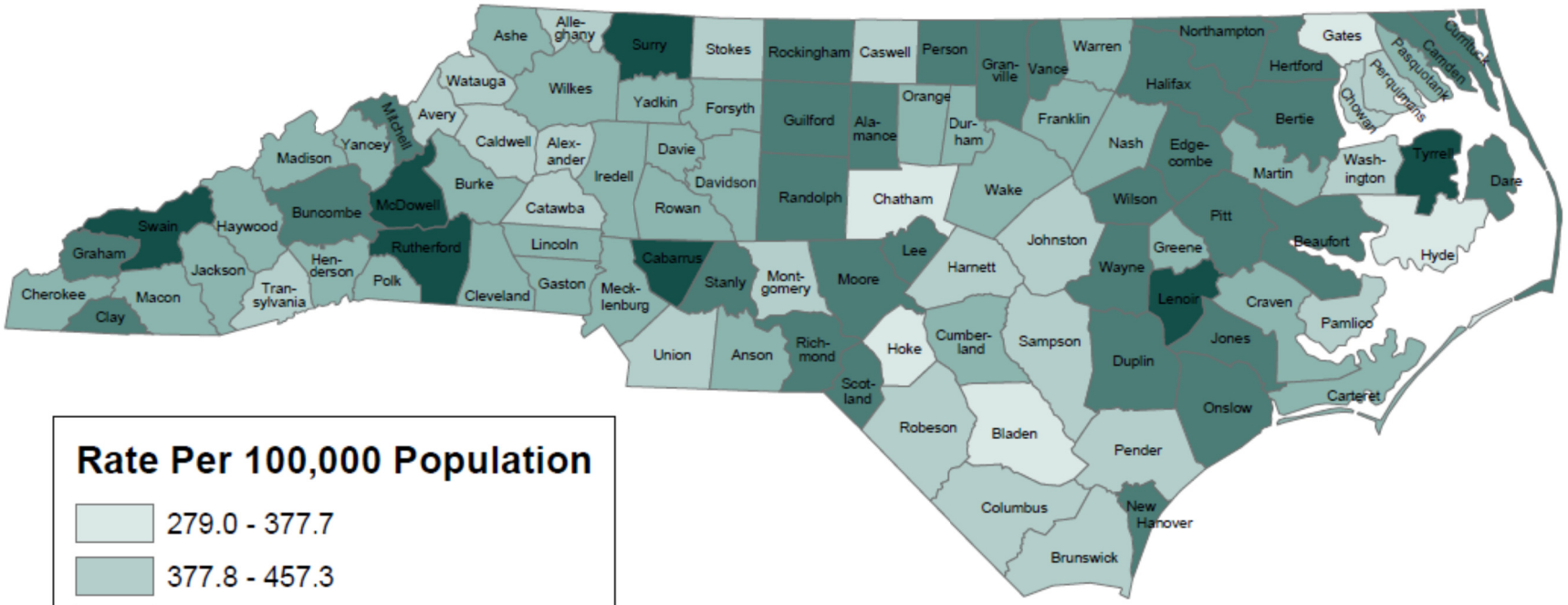
Centers for Disease Control and Prevention
www.cdc.gov

CDC Wonder United States Cancer Statistics
http://wonder.cdc.gov/cancer.html

Association of North Carolina Cancer Registrars
www.ncregistrars.com

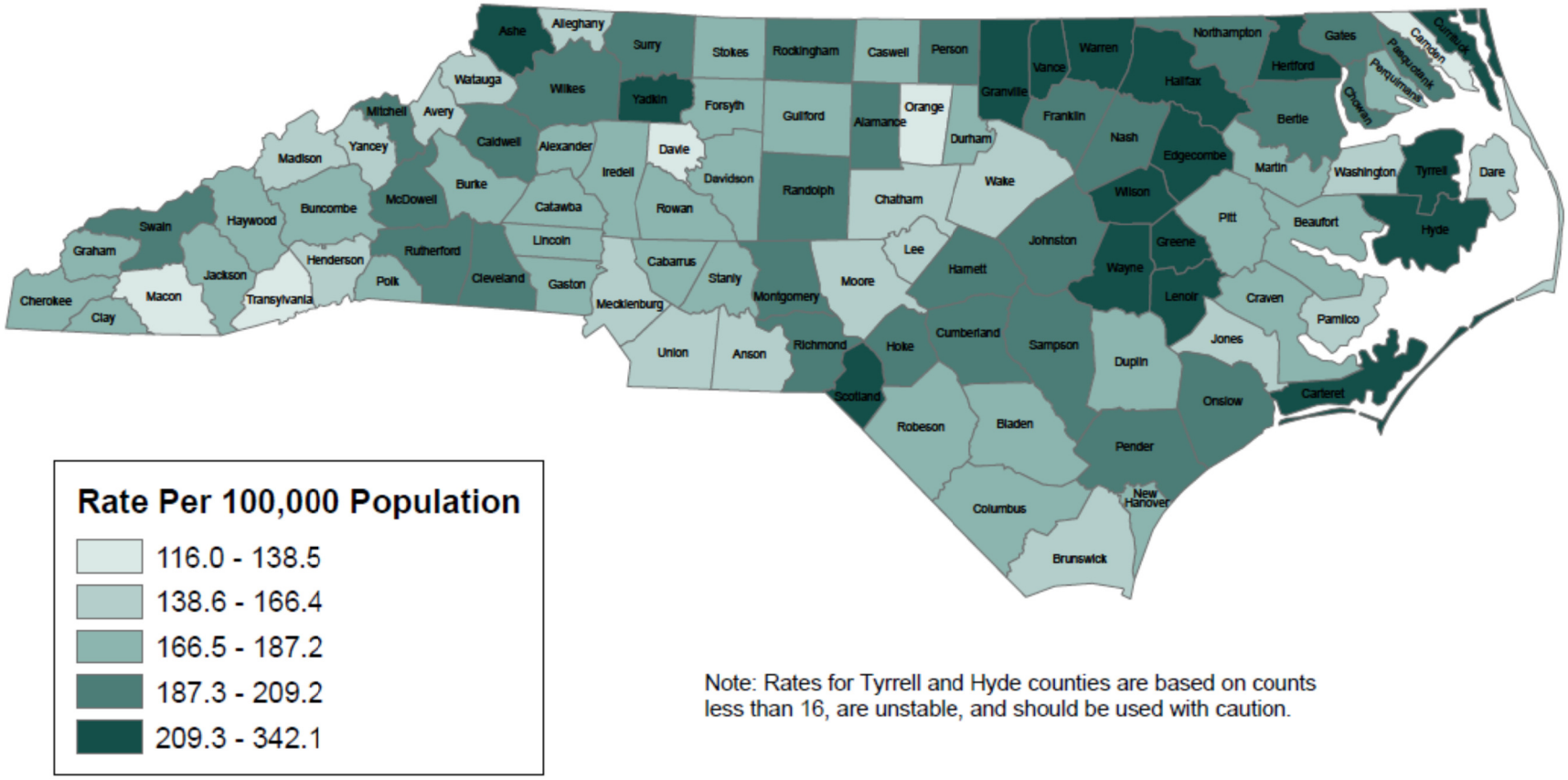
National Cancer Registrars Association
www.ncra-usa.org

Map 1: 2010 North Carolina Cancer Incidence Rates by County



Rates are based on cases reported to North Carolina Central Cancer Registry and are subject to change as files are updated.

Map 2: 2010 North Carolina Cancer Mortality Rates by County



Note: Rates for Tyrrell and Hyde counties are based on counts less than 16, are unstable, and should be used with caution.

Table 1: 2010 North Carolina Cancer Incidence and Mortality

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
All Cancers	49,340	477.6	18,013	178.4
Oral Cavity and Pharynx	1,209	11.4	260	2.5
Lip	33	0.3	1	0.0
Tongue	360	3.3	66	0.6
Salivary Glands	115	1.2	29	0.3
Floor of Mouth	66	0.6	3	0.0
Nasopharynx	54	0.5	18	0.2
Oropharynx	73	0.7	20	0.2
Hypopharynx	84	0.8	11	0.1
Other Mouth and Pharynx	424	4.0	112	1.1
Digestive System	7,859	76.3	4,065	40.0
Esophagus	465	4.4	436	4.2
Stomach	674	6.6	309	3.1
Small Intestine	302	2.9	44	0.4
Colon and Rectum	3,952	38.6	1,470	14.6
Anus and Anal Canal	160	1.6	29	0.3
Liver and Intrahepatic Bile Duct	686	6.4	537	5.1
Gallbladder	102	1.0	50	0.5
Pancreas	1,219	11.8	1,078	10.6
Other Digestive Organs	299	3.0	112	1.1
Respiratory System	7,978	77.3	5,663	55.6
Larynx	469	4.4	123	1.2
Lung and Bronchus	7,360	71.4	5,509	54.1
Other Respiratory Organs	149	1.5	31	0.3
Bones and Joints	96	1.0	35	0.4
Soft Tissue including Heart	333	3.3	154	1.6
Malignant Melanoma of the Skin	2,174	21.6	292	2.9
Breast	8,601	83.1	1,343	13.2
Invasive Breast	7,085	68.7		
In Situ Breast	1,516	14.4		
Female Genital System	2,619	46.5	846	14.8
Cervix Uteri, Invasive	331	6.4	112	2.0
Uterus (Corpus, NOS)	1,409	24.4	246	4.2
Ovary	622	11.0	430	7.5
Other Female Genital Organs	257	4.6	58	1.0

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include in situ cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 1 (continued): 2010 North Carolina Cancer Incidence and Mortality

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
Male Genital System	6,886	141.4	937	25.5
Prostate	6,649	136.3	914	24.9
Testis	199	4.4	12	0.3
Penis	33	0.7	10	0.2
Other Male Genital Organs	5	0.1	1	0.0
Urinary System	3,786	37.0	868	8.7
Urinary Bladder	2,048	20.1	432	4.4
Kidney and Renal Pelvis	1,638	15.8	415	4.1
Ureter	59	0.6	10	0.1
Other Urinary Organs	41	0.4	11	0.1
Eye and Orbit	88	0.9	7	0.1
Brain and Other CNS	683	6.8	444	4.4
Endocrine System	1,351	13.6	82	0.8
Thyroid Gland	1,282	12.9	49	0.5
Other Endocrine and Thymus	69	0.7	33	0.3
Lymphomas	2,107	21.0	622	6.3
Hodgkin Disease	243	2.5	34	0.3
Non-Hodgkin Lymphoma	1,864	18.5	588	6.0
Multiple Myeloma	691	6.7	362	3.6
Leukemia	1,178	11.7	639	6.5
Acute Lymphocytic Leukemia	104	1.1	31	0.3
Chronic Lymphocytic Leukemia	370	3.6	122	1.2
Acute Myeloid Leukemia	398	4.0	253	2.6
Chronic Myeloid Leukemia	156	1.5	39	0.4
Other Leukemia	150	1.5	194	2.0
Other Cancers - Uncategorized	4,304	43.1	1,394	13.9

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include in situ cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 2: 2010 North Carolina Top Ten Cancer Incidence and Mortality Sites

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	8,526	152.3	Lung and Bronchus	5,509	54.1
Prostate	6,649	136.3	Prostate	914	24.9
Lung and Bronchus	7,360	71.4	Female Breast	1,334	23.4
Colon and Rectum	3,952	38.6	Colon and Rectum	1,475	14.7
Corpus Uteri	1,409	24.4	Pancreas	1,078	10.6
Melanoma (Skin)	2,174	21.6	Ovary	430	7.5
Urinary Bladder	2,048	20.1	Leukemia	639	6.5
Non-Hodgkin Lymphoma	1,875	18.6	Non-Hodgkin Lymphoma	588	6.0
Kidney	1,638	15.8	Liver	537	5.1
Endocrine	1,351	13.6	Urinary Bladder	432	4.4

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 3: 2010 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
North Carolina	49,340	477.6	18,013	178.4
Alamance	866	492.7	314	177.7
Alexander	212	470.0	70	158.3
Alleghany	87	543.6	31	175.9
Anson	135	420.1	55	174.8
Ashe	173	427.4	63	155.5
Avery	101	421.2	47	194.5
Beaufort	380	577.8	134	202.2
Bertie	112	405.9	51	179.3
Bladen	172	392.7	85	201.0
Brunswick	726	441.5	265	167.3
Buncombe	1,382	459.7	526	173.2
Burke	591	520.4	240	206.1
Cabarrus	928	527.9	313	189.4
Caldwell	465	456.9	222	218.5
Camden	57	497.5	16	128.8
Carteret	509	532.1	198	202.9
Caswell	162	506.0	51	169.2
Catawba	853	482.2	330	189.4
Chatham	393	452.4	151	163.6
Cherokee	202	486.6	80	187.6
Chowan	100	486.6	50	220.1
Clay	92	516.1	33	184.4
Cleveland	594	495.6	200	174.1
Columbus	300	427.4	149	214.9
Craven	609	500.3	214	176.0
Cumberland	1,181	420.0	494	189.0
Currituck	111	420.8	43	177.2
Dare	208	496.4	70	179.6
Davidson	992	523.3	344	183.7
Davie	267	496.4	98	183.5
Duplin	274	403.4	103	156.2
Durham	1,155	476.2	397	171.6
Edgecombe	304	443.8	135	205.8
Forsyth	2,025	528.6	680	181.2

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 3 (continued): 2010 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
Franklin	298	451.8	108	178.8
Gaston	1,151	498.6	472	208.0
Gates	57	383.0	36	256.7
Graham	46	373.2	18	147.7
Granville	328	488.5	115	181.5
Greene	115	489.7	43	186.9
Guilford	2,722	534.6	825	163.1
Halifax	323	471.0	135	196.3
Harnett	484	457.4	175	175.4
Haywood	384	438.0	137	155.4
Henderson	802	479.0	257	142.1
Hertford	132	419.8	61	188.8
Hoke	169	485.1	55	186.3
Hyde	35	462.6	13	177.7
Iredell	870	503.2	313	188.4
Jackson	212	454.8	91	203.3
Johnston	757	472.8	271	189.2
Jones	80	590.9	35	246.0
Lee	306	474.9	120	190.8
Lenoir	356	467.3	165	219.8
Lincoln	418	470.8	152	174.1
McDowell	296	514.8	91	156.8
Macon	258	471.7	103	187.1
Madison	111	396.9	46	161.3
Martin	164	493.0	54	155.3
Mecklenburg	3,676	468.2	1,252	172.6
Mitchell	124	520.2	45	180.2
Montgomery	163	474.8	48	137.0
Moore	689	502.9	238	162.6
Nash	528	470.2	203	183.6
New Hanover	1,002	448.2	384	169.3
Northampton	137	434.7	66	199.6
Onslow	605	484.9	197	179.2
Orange	561	452.2	197	175.2
Pamlico	89	407.8	35	153.4

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 3 (continued): 2010 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
Pasquotank	247	546.4	96	208.6
Pender	325	507.4	105	161.8
Perquimans	78	368.5	28	141.3
Person	250	519.3	109	227.9
Pitt	728	487.7	246	171.0
Polk	130	362.8	54	159.1
Randolph	811	495.5	302	186.8
Richmond	296	547.0	125	230.0
Robeson	570	422.4	249	193.1
Rockingham	608	504.5	227	189.1
Rowan	800	497.5	303	185.6
Rutherford	406	455.9	165	179.7
Sampson	351	485.8	140	192.5
Scotland	203	490.9	80	197.6
Stanly	369	492.6	138	179.8
Stokes	273	454.8	102	170.1
Surry	428	448.5	187	195.6
Swain	93	522.9	36	215.4
Transylvania	219	367.1	85	137.7
Tyrrell	22	395.9	15	252.9
Union	833	461.0	305	187.4
Vance	234	446.1	98	183.7
Wake	3,559	465.0	1,093	156.1
Warren	130	433.1	58	197.7
Washington	93	512.8	41	212.6
Watauga	219	433.6	75	156.8
Wayne	640	480.6	222	172.3
Wilkes	397	434.3	177	195.0
Wilson	464	486.5	203	220.0
Yadkin	224	462.1	93	190.5
Yancey	120	452.5	48	174.8

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 4: 2010 Ten Highest and Lowest Cancer Incidence and Mortality Rates by County

Incidence - Lowest Ten

	Cases	Rate
Polk	130	362.8
Transylvania	219	367.1
Perquimans	78	368.5
Graham	46	373.2
Gates	57	383.0
Bladen	172	392.7
Tyrrell	22	395.9
Madison	111	396.9
Duplin	274	403.4
Bertie	112	405.9

Mortality - Lowest Ten

	Deaths	Rate
Camden	16	128.8
Montgomery	48	137.0
Transylvania	85	137.7
Perquimans	28	141.3
Henderson	257	142.1
Graham	18	147.7
Pamlico	35	153.4
Martin	54	155.3
Haywood	137	155.4
Ashe	63	155.5

Incidence - Highest Ten

	Cases	Rate
Jones	80	590.9
Beaufort	380	577.8
Richmond	296	547.0
Pasquotank	247	546.4
Alleghany	87	543.6
Guilford	2,722	534.6
Carteret	509	532.1
Forsyth	2,025	528.6
Cabarrus	928	527.9
Davidson	992	523.3

Mortality - Highest Ten

	Deaths	Rate
Gates	36	256.7
Tyrrell	15	252.9
Jones	35	246.0
Richmond	125	230.0
Person	109	227.9
Chowan	50	220.1
Wilson	203	220.0
Lenoir	165	219.8
Caldwell	222	218.5
Swain	36	215.4

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 5: 2010 Cancer Incidence and Mortality by Age Group

	Incidence				Mortality			
	0-19		20-44		0-19		20-44	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	461	18.0	3,726	115.2	51	2.0	594	18.4
Oral Cavity	7	0.3	102	3.2	0	0.0	9	0.3
Esophagus	0	0.0	16	0.5	0	0.0	7	0.2
Stomach	0	0.0	40	1.2	0	0.0	21	0.6
Colon and Rectum	9	0.4	236	7.3	2	0.1	69	2.1
Liver	13	0.5	15	0.5	0	0.0	15	0.5
Gallbladder	0	0.0	*	*	0	0.0	2	0.1
Pancreas	0	0.0	37	1.1	0	0.0	14	0.4
Larynx	0	0.0	14	0.4	0	0.0	2	0.1
Lung and Bronchus	5	0.2	122	3.8	0	0.0	61	1.9
Bone	23	0.9	19	0.6	4	0.2	11	0.3
Soft Tissue	22	0.9	52	1.6	2	0.1	25	0.8
Melanoma (Skin)	12	0.5	342	10.6	0	0.0	26	0.8
Female Breast	*	*	914	56.1	0	0.0	98	6.0
Cervix Uteri	*	*	116	7.1	0	0.0	21	1.3
Corpus Uteri	0	0.0	103	6.3	0	0.0	3	0.2
Ovary	8	0.6	62	3.8	0	0.0	21	1.3
Prostate	*	*	61	3.8	0	0.0	0	0.0
Testes	8	0.6	143	8.9	0	0.0	4	0.2
Urinary Bladder	5	0.2	33	1.0	0	0.0	6	0.2
Kidney	21	0.8	141	4.4	0	0.0	6	0.2
Endocrine	32	1.3	415	12.8	4	0.2	5	0.2
Multiple Myeloma	0	0.0	23	0.7	0	0.0	5	0.2
Leukemia	83	3.2	108	3.3	16	0.6	37	1.1
Brain and Other CNS	87	3.4	123	3.8	19	0.7	48	1.5
Hodgkin Disease	34	1.3	103	3.2	0	0.0	10	0.3
Non-Hodgkin Lymphoma	24	0.9	166	5.1	1	0.0	22	0.7
Other Cancers	65	2.5	219	6.8	3	0.1	46	1.4

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 5 (continued): 2010 Cancer Incidence and Mortality by Age Group

	Incidence				Mortality			
	45-64		65 and above		45-64		65 and above	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	19,636	783.1	25,517	2067.7	5,348	213.3	12,020	974.0
Oral Cavity	644	25.7	456	37.0	117	4.7	134	10.9
Esophagus	210	8.4	239	19.4	189	7.5	240	19.4
Stomach	247	9.9	387	31.4	84	3.4	204	16.5
Colon and Rectum	1,482	59.1	2,225	180.3	448	17.9	956	77.5
Liver	377	15.0	281	22.8	242	9.7	280	22.7
Gallbladder	31	1.2	70	5.7	16	0.6	32	2.6
Pancreas	442	17.6	740	60.0	333	13.3	731	59.2
Larynx	223	8.9	232	18.8	48	1.9	73	5.9
Lung and Bronchus	2,458	98.0	4,775	386.9	1,661	66.2	3,787	306.9
Bone	30	1.2	24	1.9	10	0.4	10	0.8
Soft Tissue	119	4.7	140	11.3	51	2.0	76	6.2
Melanoma (Skin)	807	32.2	1,013	82.1	92	3.7	174	14.1
Female Breast	4,060	311.8	3,551	500.1	505	38.8	731	102.9
Cervix Uteri	149	11.4	65	9.2	56	4.3	35	4.9
Uterus (Corpus, NOS)	706	54.2	600	84.5	89	6.8	154	21.7
Ovary	259	19.9	293	41.3	126	9.7	283	39.9
Prostate	2,970	246.4	3,617	690.3	103	8.5	811	154.8
Testes	42	3.5	6	1.1	4	0.3	4	0.8
Urinary Bladder	568	22.7	1,442	116.8	68	2.7	358	29.0
Kidney	715	28.5	761	61.7	108	4.3	301	24.4
Endocrine	575	22.9	329	26.7	29	1.2	44	3.6
Multiple Myeloma	221	8.8	447	36.2	71	2.8	286	23.2
Leukemia	348	13.9	639	51.8	123	4.9	463	37.5
Brain and Other CNS	241	9.6	232	18.8	152	6.1	225	18.2
Hodgkin Disease	64	2.6	42	3.4	8	0.3	16	1.3
Non-Hodgkin Lymphoma	647	25.8	1,038	84.1	122	4.9	443	35.9
Other Cancers	1,001	39.9	1,873	151.8	493	19.7	1,169	94.7

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 6: 2010 Top Ten Cancer Incidence and Mortality by Age Group

Ages 0 to 19

Incidence	Cases	Rate	Mortality	Deaths	Rate
Brain and Other CNS	87	3.4	Brain and Other CNS	19	0.7
Leukemia	83	3.2	Leukemia	16	0.6
Endocrine	32	1.3	Endocrine	4	0.2
Hodgkin Disease	34	1.3	Bone	4	0.2
Non-Hodgkin Lymphoma	24	0.9	Soft Tissue	2	0.1
Soft Tissue	22	0.9	Colon and Rectum	2	0.1
Bone	23	0.9	Non-Hodgkin Lymphoma	1	0.0
Kidney	21	0.8			
Ovary	8	0.6			
Testes	8	0.6			

Ages 20 to 44

Incidence	Cases	Rate	Mortality	Deaths	Rate
Female Breast	914	56.1	Female Breast	98	6.0
Endocrine	415	12.8	Colon and Rectum	69	2.1
Melanoma (Skin)	342	10.6	Lung and Bronchus	61	1.9
Testes	143	8.9	Brain and Other CNS	48	1.5
Colon and Rectum	236	7.3	Ovary	21	1.3
Cervix Uteri	116	7.1	Cervix Uteri	21	1.3
Corpus Uteri	103	6.3	Leukemia	37	1.1
Non-Hodgkin Lymphoma	166	5.1	Melanoma (Skin)	26	0.8
Kidney	141	4.4	Soft Tissue	25	0.8
Lung and Bronchus	122	3.8	Non-Hodgkin Lymphoma	22	0.7

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 6 (continued): 2010 Top Ten Cancer Incidence and Mortality by Age Group

Ages 45 to 64

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	4,060	311.8	Lung and Bronchus	1,661	66.2
Prostate	2,970	246.4	Female Breast	505	38.8
Lung and Bronchus	2,458	98.0	Colon and Rectum	448	17.9
Colon and Rectum	1,482	59.1	Pancreas	333	13.3
Corpus Uteri	706	54.2	Liver	242	9.7
Melanoma (Skin)	807	32.2	Ovary	126	9.7
Kidney	715	28.5	Prostate	103	8.5
Non-Hodgkin Lymphoma	647	25.8	Esophagus	189	7.5
Oral Cavity	644	25.7	Corpus Uteri	89	6.8
Endocrine	575	22.9	Brain and Other CNS	152	6.1

Ages 65 and above

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	3,617	690.3	Lung and Bronchus	3,787	306.9
Female Breast	3,551	500.1	Prostate	811	154.8
Lung and Bronchus	4,775	386.9	Female Breast	731	102.9
Colon and Rectum	2,225	180.3	Colon and Rectum	956	77.5
Urinary Bladder	1,442	116.8	Pancreas	731	59.2
Corpus Uteri	600	84.5	Ovary	283	39.9
Non-Hodgkin Lymphoma	1,038	84.1	Leukemia	463	37.5
Melanoma (Skin)	1,013	82.1	Non-Hodgkin Lymphoma	443	35.9
Kidney	761	61.7	Urinary Bladder	358	29.0
Pancreas	740	60.0	Kidney	301	24.4

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 7: 2010 Cancer Incidence and Mortality by Gender

	Incidence				Mortality			
	Males		Females		Males		Females	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	ts of	535.3	24,639	440.3	9,658	226.8	8,355	145.7
Oral Cavity and Pharynx	856	17.4	353	6.2	176	3.8	84	1.5
Lip	23	0.5	10	0.2	0	0.0	1	0.0
Tongue	246	4.8	114	2.0	42	0.9	24	0.4
Salivary Glands	75	1.8	40	0.7	23	0.5	6	0.1
Floor of Mouth	46	0.9	20	0.3	1	0.0	2	0.0
Nasopharynx	40	0.8	14	0.2	12	0.2	6	0.1
Oropharynx	58	1.2	15	0.2	11	0.3	9	0.2
Hypopharynx	69	1.4	15	0.3	9	0.2	2	0.0
Other Mouth and Pharynx	299	6.0	125	2.2	78	1.6	34	0.6
Digestive System	4,248	92.6	3,610	63.6	2,356	53.5	1,709	29.5
Esophagus	383	8.1	82	1.4	349	7.6	87	1.5
Stomach	409	9.0	265	4.6	171	4.0	138	2.4
Small Intestine	144	3.0	158	2.8	22	0.5	22	0.4
Colon and Rectum	1,979	43.8	1,972	34.9	801	18.9	669	11.5
Anus and Anal Canal	60	1.3	100	1.8	12	0.3	17	0.3
Liver and Intrahepatic Bile Duct	485	9.8	201	3.5	385	8.1	152	2.7
Gallbladder	41	0.9	61	1.1	23	0.5	27	0.5
Pancreas	638	14.0	581	10.1	553	12.6	525	9.0
Other Digestive Organs	109	2.5	190	3.4	40	1.0	72	1.2
Respiratory System	4,676	103.4	3,302	57.7	3,361	76.2	2,302	40.3
Larynx	371	7.8	98	1.7	102	2.3	21	0.4
Lung and Bronchus	4,199	93.1	3,161	55.2	3,243	73.6	2,266	39.7
Other Respiratory Organs	106	2.5	43	0.8	16	0.4	15	0.3
Bones and Joints	53	1.1	43	0.8	20	0.4	15	0.3
Soft Tissue including Heart	187	4.2	146	2.6	71	1.7	83	1.5
Malignant Melanoma of the Skin	1,276	28.5	896	16.8	198	4.6	94	1.7
Breast	75	1.7	8,526	152.3	9	0.2	1,334	23.4
Invasive Breast	65	1.5	7,020	125.5				
In Situ Breast	10	0.2	1,506	26.8				
Female Genital System	.	.	2,619	46.5	.	.	846	14.8
Cervix Uteri, Invasive	.	.	331	6.4	.	.	112	2.0
Uterus (Corpus, NOS)	.	.	1,409	24.4	.	.	246	4.2
Ovary	.	.	622	11.0	.	.	430	7.5
Other Female Genital Organs	.	.	257	4.6	.	.	58	1.0

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 7 (continued): 2010 Cancer Incidence and Mortality by Gender

	Incidence				Mortality			
	Males		Females		Males		Females	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
Male Genital System	6,886	141.4	.	.	937	25.5	.	.
Prostate	6,649	136.3	.	.	914	24.9	.	.
Testis	199	4.4	.	.	12	0.3	.	.
Penis	33	0.7	.	.	10	0.2	.	.
Other Male Genital Organs	5	0.1	.	.	1	0.0	.	.
Urinary System	2,624	59.2	1,162	20.5	576	14.5	292	5.0
Urinary Bladder	1,564	36.5	484	8.4	303	8.0	129	2.2
Kidney and Renal Pelvis	1,001	21.2	637	11.4	261	6.1	154	2.7
Ureter	35	0.8	24	0.4	7	0.2	3	0.0
Other Urinary Organs	24	0.6	17	0.3	5	0.1	6	0.1
Eye and Orbit	48	1.1	40	0.8	4	0.1	3	0.1
Brain and Other CNS	370	7.9	313	5.9	249	5.5	195	3.4
Endocrine System	352	7.5	999	19.3	36	0.8	46	0.8
Thyroid Gland	322	6.9	960	18.6	22	0.5	27	0.5
Other Endocrine and Thymus	30	0.6	39	0.7	14	0.3	19	0.3
Lymphomas	1,099	24.6	1,008	18.3	337	8.1	285	4.9
Hodgkin Disease	126	2.7	117	2.4	16	0.3	18	0.3
Non-Hodgkin Lymphoma	973	21.9	891	15.9	321	7.7	267	4.6
Multiple Myeloma	372	8.4	319	5.5	192	4.7	170	2.9
Leukemia	668	14.9	509	9.2	355	8.8	284	5.1
Acute Lymphocytic Leukemia	56	1.2	48	1.0	12	0.3	19	0.4
Chronic Lymphocytic Leukemia	215	4.9	155	2.7	81	2.1	41	0.7
Acute Myeloid Leukemia	213	4.8	185	3.4	147	3.6	106	1.9
Chronic Myeloid Leukemia	94	2.0	61	1.1	22	0.5	17	0.3
Other Leukemia	90	2.0	60	1.0	93	2.3	101	1.8
Other Cancers - Uncategorized	2,423	55.2	1,879	34.4	781	18.5	613	10.6

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 8: 2010 Top Ten Cancer Incidence and Mortality Sites by Gender

Males

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	6,649	136.3	Lung and Bronchus	3,243	73.6
Lung and Bronchus	4,199	93.1	Prostate	914	24.9
Colon and Rectum	1,979	43.8	Colon and Rectum	804	19.0
Urinary Bladder	1,564	36.5	Pancreas	553	12.6
Melanoma (Skin)	1,276	28.5	Leukemia	355	8.8
Non-Hodgkin Lymphoma	977	22.0	Liver	385	8.1
Kidney	1,001	21.2	Urinary Bladder	303	8.0
Oral Cavity	856	17.4	Non-Hodgkin Lymphoma	321	7.7
Leukemia	668	14.9	Esophagus	349	7.6
Pancreas	638	14.0	Kidney	261	6.1

Females

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	8,526	152.3	Lung and Bronchus	2,266	39.7
Lung and Bronchus	3,161	55.2	Female Breast	1,334	23.4
Colon and Rectum	1,972	34.9	Colon and Rectum	671	11.5
Corpus Uteri	1,409	24.4	Pancreas	525	9.0
Endocrine	999	19.3	Ovary	430	7.5
Melanoma (Skin)	896	16.8	Leukemia	284	5.1
Non-Hodgkin Lymphoma	898	16.1	Non-Hodgkin Lymphoma	267	4.6
Kidney	637	11.4	Corpus Uteri	246	4.2
Ovary	622	11.0	Brain and Other CNS	195	3.4
Pancreas	581	10.1	Multiple Myeloma	170	2.9

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 9: 2010 Cancer Incidence and Mortality by Race

	Incidence				Mortality			
	Whites		Minorities		Whites		Minorities	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	38,751	475.2	10,366	475.8	14,063	173.3	3,949	197.6
Oral Cavity and Pharynx	943	11.4	263	11.3	190	2.3	70	3.2
Lip	32	0.4	*	*	1	0.0	0	0.0
Tongue	304	3.6	55	2.4	54	0.7	12	0.6
Salivary Glands	86	1.1	29	1.3	26	0.3	3	0.2
Floor of Mouth	46	0.5	20	0.8	1	0.0	2	0.1
Nasopharynx	40	0.5	14	0.6	12	0.2	6	0.2
Oropharynx	51	0.6	22	0.9	11	0.1	9	0.4
Hypopharynx	59	0.7	25	1.1	6	0.1	5	0.3
Other Mouth and Pharynx	325	3.9	97	4.1	79	0.9	33	1.5
Digestive System	5,925	72.4	1,906	89.7	3,021	37.1	1,044	51.6
Esophagus	365	4.4	98	4.3	345	4.2	91	4.1
Stomach	471	5.8	202	9.9	216	2.7	93	4.9
Small Intestine	216	2.6	84	3.9	28	0.3	16	0.7
Colon and Rectum	2,984	36.7	952	45.2	1,077	13.4	393	20.0
Anus and Anal Canal	131	1.6	28	1.2	24	0.3	5	0.3
Liver and Intrahepatic Bile Duct	507	6.1	176	7.2	392	4.8	145	6.2
Gallbladder	71	0.9	31	1.6	34	0.4	16	0.8
Pancreas	930	11.3	287	13.9	813	9.9	265	13.6
Other Digestive Organs	250	3.1	48	2.4	92	1.1	20	1.0
Respiratory System	6,366	77.1	1,596	76.4	4,548	55.5	1,115	55.2
Larynx	343	4.1	123	5.6	80	1.0	43	1.9
Lung and Bronchus	5,891	71.4	1,457	70.1	4,442	54.1	1,067	53.0
Other Respiratory Organs	132	1.7	16	0.7	26	0.3	5	0.2
Bones and Joints	77	1.1	17	0.7	28	0.4	6	0.2
Soft Tissue including Heart	271	3.5	61	2.7	128	1.7	26	1.1
Malignant Melanoma of the Skin	2,130	27.1	29	1.4	283	3.5	9	0.5
Breast	6,637	81.6	1,938	86.3	1,003	12.3	340	16.1
Invasive Breast	5,457	67.2	1,606	72.0				
In Situ Breast	1,180	14.4	332	14.3				
Female Genital System	2,053	47.1	552	43.6	641	14.1	205	17.4
Cervix Uteri, Invasive	238	6.3	89	7.0	66	1.6	46	3.5
Uterus (Corpus, NOS)	1,124	25.0	276	22.1	162	3.5	84	7.3
Ovary	487	11.1	134	10.4	366	8.0	64	5.6
Other Female Genital Organs	204	4.7	53	4.1	47	1.0	11	1.0

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 9 (continued): 2010 Cancer Incidence and Mortality by Race

	Incidence				Mortality			
	Whites		Minorities		Whites		Minorities	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
Male Genital System	4,985	127.3	1,845	198.1	610	20.0	327	55.6
Prostate	4,768	120.9	1,825	196.2	592	19.4	322	54.9
Testis	185	5.5	14	1.3	12	0.4	0	0.0
Penis	27	0.7	6	0.6	5	0.2	5	0.7
Other Male Genital Organs	5	0.1	*	*	1	0.0	0	0.0
Urinary System	3,138	38.3	636	30.2	740	9.2	128	6.7
Urinary Bladder	1,803	22.0	238	11.9	372	4.7	60	3.1
Kidney and Renal Pelvis	1,251	15.3	382	17.4	350	4.3	65	3.5
Ureter	51	0.6	8	0.5	9	0.1	1	0.1
Other Urinary Organs	33	0.4	8	0.4	9	0.1	2	0.1
Eye and Orbit	80	1.0	7	0.3	7	0.1	0	0.0
Brain and Other CNS	576	7.5	101	4.3	377	4.7	67	3.1
Endocrine System	1,080	14.3	263	11.0	68	0.8	14	0.7
Thyroid Gland	1,029	13.7	245	10.3	39	0.5	10	0.5
Other Endocrine and Thymus	51	0.7	18	0.7	29	0.4	4	0.2
Lymphomas	1,726	21.8	371	16.5	535	6.7	87	4.3
Hodgkin Disease	178	2.5	64	2.5	29	0.4	5	0.3
Non-Hodgkin Lymphoma	1,548	19.3	307	14.0	506	6.3	82	4.0
Multiple Myeloma	423	5.2	263	13.0	243	3.0	119	6.3
Leukemia	958	12.1	210	9.7	530	6.8	109	5.5
Acute Lymphocytic Leukemia	88	1.3	15	0.6	26	0.4	5	0.2
Chronic Lymphocytic Leukemia	314	3.8	52	2.5	99	1.2	23	1.2
Acute Myeloid Leukemia	312	4.0	83	3.9	222	2.8	31	1.6
Chronic Myeloid Leukemia	121	1.5	33	1.5	30	0.4	9	0.4
Other Leukemia	123	1.5	27	1.3	153	2.0	41	2.1
Other Cancers - Uncategorized	3,861	49.1	415	20.0	1,111	13.7	283	13.9

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 10: 2010 Top Ten Cancer Incidence and Mortality Sites by Race

Whites

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	6,584	151.8	Lung and Bronchus	4,442	54.1
Prostate	4,768	120.9	Female Breast	996	22.1
Lung and Bronchus	5,891	71.4	Prostate	592	19.4
Colon and Rectum	2,984	36.7	Colon and Rectum	1,082	13.4
Melanoma (Skin)	2,130	27.1	Pancreas	813	9.9
Corpus Uteri	1,124	25.0	Ovary	366	8.0
Urinary Bladder	1,803	22.0	Leukemia	530	6.8
Non-Hodgkin Lymphoma	1,556	19.4	Non-Hodgkin Lymphoma	506	6.3
Kidney	1,251	15.3	Liver	392	4.8
Endocrine	1,080	14.3	Urinary Bladder	372	4.7

Minorities

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	1,825	196.2	Prostate	322	54.9
Female Breast	1,916	149.8	Lung and Bronchus	1,067	53.0
Lung and Bronchus	1,457	70.1	Female Breast	338	27.3
Colon and Rectum	952	45.2	Colon and Rectum	393	20.0
Corpus Uteri	276	22.1	Pancreas	265	13.6
Kidney	382	17.4	Corpus Uteri	84	7.3
Non-Hodgkin Lymphoma	310	14.2	Multiple Myeloma	119	6.3
Pancreas	287	13.9	Liver	145	6.2
Multiple Myeloma	263	13.0	Ovary	64	5.6
Urinary Bladder	238	11.9	Leukemia	109	5.5

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 11: 2010 Top Ten Cancer Incidence and Mortality by Race and Gender

White Males

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	4,768	120.9	Lung and Bronchus	2,554	70.8
Lung and Bronchus	3,313	90.3	Prostate	592	19.4
Colon and Rectum	1,517	41.8	Colon and Rectum	614	17.8
Urinary Bladder	1,396	39.5	Pancreas	425	11.9
Melanoma (Skin)	1,259	34.7	Leukemia	298	8.9
Non-Hodgkin Lymphoma	819	22.9	Urinary Bladder	267	8.4
Kidney	766	20.3	Non-Hodgkin Lymphoma	279	8.2
Oral Cavity	668	17.2	Esophagus	281	7.6
Leukemia	554	15.5	Liver	274	7.4
Pancreas	504	13.7	Kidney	220	6.3

White Females

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	6,584	151.8	Lung and Bronchus	1,888	41.6
Lung and Bronchus	2,578	56.9	Female Breast	996	22.1
Colon and Rectum	1,467	33.0	Colon and Rectum	468	10.1
Corpus Uteri	1,124	25.0	Pancreas	388	8.3
Melanoma (Skin)	869	21.6	Ovary	366	8.0
Endocrine	779	20.3	Leukemia	232	5.3
Non-Hodgkin Lymphoma	737	16.7	Non-Hodgkin Lymphoma	227	4.8
Kidney	485	11.2	Brain and Other CNS	165	3.7
Ovary	487	11.1	Corpus Uteri	162	3.5
Leukemia	403	9.4	Kidney	130	2.8

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 11 (continued): 2010 Top Ten Cancer Incidence and Mortality by Race and Gender

Minority Males

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	1,825	196.2	Lung and Bronchus	689	85.8
Lung and Bronchus	882	103.1	Prostate	322	54.9
Colon and Rectum	456	52.0	Colon and Rectum	190	25.6
Kidney	231	24.3	Pancreas	128	16.0
Urinary Bladder	163	20.7	Liver	111	10.5
Oral Cavity	186	18.5	Leukemia	57	8.4
Multiple Myeloma	140	17.0	Esophagus	68	7.6
Non-Hodgkin Lymphoma	154	16.8	Multiple Myeloma	54	7.6
Pancreas	132	14.8	Stomach	55	7.3
Stomach	106	12.4	Kidney	41	5.7

Minority Females

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	1,916	149.8	Lung and Bronchus	378	32.2
Lung and Bronchus	575	48.1	Female Breast	338	27.3
Colon and Rectum	495	41.0	Colon and Rectum	203	16.9
Corpus Uteri	276	22.1	Pancreas	137	12.1
Endocrine	213	16.3	Corpus Uteri	84	7.3
Pancreas	155	13.2	Ovary	64	5.6
Non-Hodgkin Lymphoma	156	12.4	Multiple Myeloma	65	5.5
Kidney	151	12.3	Leukemia	52	4.2
Ovary	134	10.4	Cervix Uteri	46	3.5
Multiple Myeloma	123	10.3	Stomach	38	3.4

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 12: 2006 – 2010 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

White Males

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Leukemia	203	4.5	Leukemia	26	0.6
Brain and Other CNS	153	3.4	Brain and Other CNS	23	0.5
Non-Hodgkin Lymphoma	61	1.4	Bone	14	0.3
Bone	54	1.2	Endocrine	9	0.2
Soft Tissue	50	1.1	Soft Tissue	6	0.1
Hodgkin Disease	47	1.0			
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Testes	746	12.6	Lung and Bronchus	131	2.2
Melanoma (Skin)	742	12.5	Brain and Other CNS	114	1.9
Colon and Rectum	451	7.6	Colon and Rectum	105	1.8
Non-Hodgkin Lymphoma	366	6.2	Leukemia	87	1.5
Endocrine	331	5.6	Melanoma (Skin)	61	1.0
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	10,455	236.0	Lung and Bronchus	3,628	81.9
Lung and Bronchus	5,214	117.7	Colon and Rectum	915	20.7
Colon and Rectum	3,228	72.9	Pancreas	608	13.7
Melanoma (Skin)	2,192	49.5	Liver	559	12.6
Oral Cavity	1,815	41.0	Esophagus	495	11.2
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	14,571	712.4	Lung and Bronchus	8,873	433.8
Lung and Bronchus	11,079	541.6	Prostate	2,644	129.3
Urinary Bladder	4,869	238.0	Colon and Rectum	1,935	94.6
Colon and Rectum	4,764	232.9	Pancreas	1,288	63.0
Melanoma (Skin)	2,919	142.7	Leukemia	1,161	56.8

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 12 (continued): 2006 – 2010 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

White Females

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Leukemia	165	3.9	Brain and Other CNS	25	0.6
Brain and Other CNS	141	3.3	Leukemia	23	0.5
Endocrine	92	2.2	Bone	13	0.3
Hodgkin Disease	52	1.2	Endocrine	8	0.2
Soft Tissue	44	1.0	Soft Tissue	6	0.1
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	3,346	59.2	Female Breast	253	4.5
Endocrine	1,276	22.6	Lung and Bronchus	143	2.5
Melanoma (Skin)	1,176	20.8	Colon and Rectum	93	1.6
Cervix Uteri	515	9.1	Leukemia	67	1.2
Colon and Rectum	409	7.2	Cervix Uteri	53	0.9
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	14,868	321.1	Lung and Bronchus	2,543	54.9
Lung and Bronchus	4,027	87.0	Female Breast	1,646	35.5
Corpus Uteri	2,554	55.2	Colon and Rectum	618	13.3
Colon and Rectum	2,377	51.3	Ovary	486	10.5
Melanoma (Skin)	1,686	36.4	Pancreas	439	9.5
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	14,050	513.8	Lung and Bronchus	6,686	244.5
Lung and Bronchus	8,732	319.3	Female Breast	2,750	100.6
Colon and Rectum	4,772	174.5	Colon and Rectum	1,968	72.0
Non-Hodgkin Lymphoma	2,139	78.2	Pancreas	1,510	55.2
Corpus Uteri	2,034	74.4	Ovary	1,191	43.6

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 12 (continued): 2006 – 2010 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

Minority Males

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Leukemia	66	3.5	Leukemia	14	0.7
Brain and Other CNS	53	2.8	Brain and Other CNS	11	0.6
Non-Hodgkin Lymphoma	28	1.5	Endocrine	6	0.3
Kidney	22	1.2	Non-Hodgkin Lymphoma	4	0.2
Hodgkin Disease	16	0.8	Bone	2	0.1
			Soft Tissue	2	0.1
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Colon and Rectum	177	8.5	Colon and Rectum	49	2.4
Non-Hodgkin Lymphoma	159	7.6	Lung and Bronchus	44	2.1
Prostate	140	6.7	Leukemia	29	1.4
Kidney	124	6.0	Brain and Other CNS	23	1.1
Hodgkin Disease	91	4.4	Oral Cavity	22	1.1
			Stomach	22	1.1
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	4,880	391.6	Lung and Bronchus	1,350	108.3
Lung and Bronchus	1,894	152.0	Colon and Rectum	372	29.8
Colon and Rectum	1,169	93.8	Liver	309	24.8
Kidney	574	46.1	Pancreas	237	19.0
Oral Cavity	560	44.9	Prostate	225	18.1
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	4,335	1110.7	Lung and Bronchus	1,780	456.1
Lung and Bronchus	2,115	541.9	Prostate	1,282	328.5
Colon and Rectum	1,049	268.8	Colon and Rectum	535	137.1
Urinary Bladder	445	114.0	Pancreas	296	75.8
Kidney	366	93.8	Stomach	174	44.6

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 12 (continued): 2006 – 2010 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

Minority Females

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Leukemia	49	2.6	Leukemia	14	0.8
Brain and Other CNS	39	2.1	Brain and Other CNS	10	0.5
Kidney	24	1.3	Bone	4	0.2
Hodgkin Disease	24	1.3	Kidney	3	0.2
Ovary	19	1.0	Soft Tissue	2	0.1
			Endocrine	2	0.1
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	1,377	60.2	Female Breast	187	8.2
Endocrine	328	14.3	Colon and Rectum	50	2.2
Colon and Rectum	192	8.4	Lung and Bronchus	42	1.8
Cervix Uteri	185	8.1	Cervix Uteri	40	1.7
Non-Hodgkin Lymphoma	159	6.9	Leukemia	28	1.2
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	4,516	303.7	Female Breast	753	50.6
Lung and Bronchus	1,100	74.0	Lung and Bronchus	671	45.1
Colon and Rectum	1,078	72.5	Colon and Rectum	319	21.5
Corpus Uteri	572	38.5	Pancreas	169	11.4
Endocrine	403	27.1	Corpus Uteri	120	8.1
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	2,896	462.0	Lung and Bronchus	1,039	165.8
Lung and Bronchus	1,395	222.6	Female Breast	698	111.4
Colon and Rectum	1,228	195.9	Colon and Rectum	582	92.9
Corpus Uteri	608	97.0	Pancreas	488	77.9
Pancreas	482	76.9	Corpus Uteri	274	43.7

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Table 13: 2010 Cancer Incidence and Mortality by Race and Ethnicity

	Incidence				Mortality			
	Non-Hispanic Whites		Non-Hispanic Blacks		Non-Hispanic Whites		Non-Hispanic Blacks	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	37,985	481.0	9,397	496.0	13,875	174.9	3,670	208.8
Oral Cavity	934	11.7	243	12.1	188	2.3	69	3.6
Esophagus	363	4.5	95	4.8	345	4.3	86	4.4
Stomach	441	5.5	179	10.1	209	2.7	84	5.0
Colon and Rectum	2,939	37.2	889	48.2	1,064	13.6	366	21.1
Liver	488	6.0	153	7.1	381	4.7	123	5.9
Gallbladder	66	0.8	29	1.7	33	0.4	14	0.8
Pancreas	915	11.4	267	14.7	803	10.0	245	14.3
Larynx	341	4.2	120	6.2	80	1.0	42	2.2
Lung and Bronchus	5,837	72.2	1,339	73.4	4,409	54.8	984	55.5
Bone	72	1.1	17	0.9	26	0.4	5	0.2
Soft Tissue	254	3.4	56	2.9	123	1.7	23	1.1
Melanoma (Skin)	2,114	28.2	16	0.9	282	3.6	9	0.5
Female Breast	6,440	153.4	1,734	156.6	977	22.2	326	30.1
Cervix Uteri	221	6.3	78	7.1	63	1.6	43	3.8
Uterus (Corpus, NOS)	1,099	25.1	233	21.5	160	3.5	81	8.0
Ovary	473	11.0	118	10.7	361	8.1	56	5.5
Prostate	4,697	121.9	1,687	208.2	584	19.4	312	59.6
Testes	175	6.0	11	1.3	11	0.4	0	0.0
Urinary Bladder	1,787	22.2	212	11.9	371	4.7	55	3.2
Kidney	1,221	15.4	352	18.5	346	4.3	60	3.6
Endocrine	1,034	14.7	209	10.4	66	0.9	14	0.8
Multiple Myeloma	413	5.2	248	13.9	237	3.0	115	6.9
Leukemia	915	12.0	177	9.6	517	6.8	95	5.6
Brain and Other CNS	556	7.7	87	4.4	368	4.8	55	3.0
Hodgkin Disease	173	2.7	61	2.9	28	0.4	5	0.3
Non-Hodgkin Lymphoma	1,513	19.5	275	14.6	498	6.4	78	4.4
Other Cancers	2,504	32.4	512	28.2	1,345	17.0	325	18.2

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.).

Table 13 (continued): 2010 Cancer Incidence and Mortality by Race and Ethnicity

	Incidence				Mortality			
	Non-Hispanic Other Races		Hispanics		Non-Hispanic Other Races		Hispanics	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	1,051	445.5	907	330.8	271	125.8	197	106.2
Oral Cavity	21	6.7	11	4.3	1	0.3	2	0.6
Esophagus	*	*	*	*	5	1.8	0	0.0
Stomach	24	10.5	30	11.8	9	4.2	7	2.8
Colon and Rectum	67	28.1	57	24.1	27	11.6	18	11.1
Liver	23	9.5	22	9.0	22	10.0	11	6.7
Gallbladder	*	*	5	3.3	2	0.7	1	0.9
Pancreas	18	7.9	19	8.5	18	7.2	12	7.6
Larynx	5	2.6	*	*	1	0.3	0	0.0
Lung and Bronchus	120	52.8	64	38.2	81	37.9	35	22.3
Bone	*	*	5	0.6	2	0.5	2	0.2
Soft Tissue	6	2.3	17	4.5	2	0.5	6	2.7
Melanoma (Skin)	28	12.7	16	2.8	0	0.0	1	0.2
Female Breast	185	127.3	167	105.9	12	8.8	19	14.7
Cervix Uteri	9	6.4	23	10.8	3	2.5	3	1.5
Uterus (Corpus, NOS)	50	34.6	27	16.2	3	1.6	2	1.4
Ovary	15	9.5	16	7.1	7	6.6	6	5.4
Prostate	170	172.7	95	98.9	9	19.5	9	20.0
Testes	*	*	10	1.8	0	0.0	1	0.3
Urinary Bladder	33	20.0	16	10.7	5	2.9	1	1.0
Kidney	27	10.9	38	13.1	5	3.0	4	2.7
Endocrine	46	15.9	62	13.7	0	0.0	2	1.2
Multiple Myeloma	18	9.5	12	5.8	4	2.0	6	3.7
Leukemia	39	17.0	47	13.7	13	5.8	14	6.0
Brain and Other CNS	18	7.5	22	3.2	12	3.9	9	2.5
Hodgkin Disease	*	*	5	0.5	0	0.0	1	0.1
Non-Hodgkin Lymphoma	38	15.2	49	15.3	4	1.8	8	4.3
Other Cancers	77	37.1	65	26.9	24	13.1	17	9.0

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.).

Table 14: 2010 Top Ten Cancer Incidence and Mortality Sites by Race and Ethnicity

Non-Hispanic Whites

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	6,440	153.4	Lung and Bronchus	4,409	54.8
Prostate	4,697	121.9	Female Breast	977	22.2
Lung and Bronchus	5,837	72.2	Prostate	584	19.4
Colon and Rectum	2,939	37.2	Colon and Rectum	1,064	13.6
Melanoma (Skin)	2,114	28.2	Pancreas	803	10.0
Corpus Uteri	1,099	25.1	Ovary	361	8.1
Urinary Bladder	1,787	22.2	Leukemia	517	6.8
Non-Hodgkin Lymphoma	1,513	19.5	Non-Hodgkin Lymphoma	498	6.4
Kidney	1,221	15.4	Brain and Other CNS	368	4.8
Endocrine	1,034	14.7	Liver	381	4.7

Non-Hispanic Blacks

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	1,687	208.2	Prostate	312	59.6
Female Breast	1,734	156.6	Lung and Bronchus	984	55.5
Lung and Bronchus	1,339	73.4	Female Breast	326	30.1
Colon and Rectum	889	48.2	Colon and Rectum	366	21.1
Corpus Uteri	233	21.5	Pancreas	245	14.3
Kidney	352	18.5	Corpus Uteri	81	8.0
Pancreas	267	14.7	Multiple Myeloma	115	6.9
Non-Hodgkin Lymphoma	275	14.6	Liver	123	5.9
Multiple Myeloma	248	13.9	Leukemia	95	5.6
Oral Cavity	243	12.1	Ovary	56	5.5

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.).

Table 14 (continued): 2010 Top Ten Cancer Incidence and Mortality Sites by Race and Ethnicity

Non-Hispanic Other Races

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	170	172.7	Lung and Bronchus	81	37.9
Female Breast	185	127.3	Prostate	9	19.5
Lung and Bronchus	120	52.8	Colon and Rectum	27	11.6
Corpus Uteri	50	34.6	Liver	22	10.0
Colon and Rectum	67	28.1	Female Breast	12	8.8
Urinary Bladder	33	20.0	Pancreas	18	7.2
Leukemia	39	17.0	Ovary	7	6.6
Endocrine	46	15.9	Leukemia	13	5.8
Non-Hodgkin Lymphoma	38	15.2	Stomach	9	4.2
Melanoma (Skin)	28	12.7	Brain and Other CNS	12	3.9

Hispanics

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	167	105.9	Lung and Bronchus	35	22.3
Prostate	95	98.9	Prostate	9	20.0
Lung and Bronchus	64	38.2	Female Breast	19	14.7
Colon and Rectum	57	24.1	Colon and Rectum	18	11.1
Corpus Uteri	27	16.2	Pancreas	12	7.6
Non-Hodgkin Lymphoma	49	15.3	Liver	11	6.7
Leukemia	47	13.7	Leukemia	14	6.0
Endocrine	62	13.7	Ovary	6	5.4
Kidney	38	13.1	Non-Hodgkin Lymphoma	8	4.3
Stomach	30	11.8	Multiple Myeloma	6	3.7

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.).

Table 15: 2010 Cancer Incidence and Mortality Median Age

Incidence

	All	Males	Females	Non-Hispanic Whites	Non-Hispanic Blacks	Non-Hispanic Others	Hispanics
All Cancers	65	66	64	66	62	61	52
Oral Cavity	61	60	64	62	60	51	63
Esophagus	65	65	65.5	66	61	*	*
Stomach	68	66	69	69	65	66.5	57
Colon and Rectum	67	65	68	68	63	61	53
Liver	62	61	68	64	59	58	58
Gallbladder	72	68	73	72	69	*	73
Pancreas	68	67	71	69	66	64.5	61
Larynx	64	65	62	65	64	62	*
Lung and Bronchus	69	68	69	69	66	63.5	67
Bone	50.5	39	53	51	53	*	23
Soft Tissue	62	62	61.5	63	55	53.5	38
Melanoma (Skin)	63	66	58.5	63	64.5	59.5	43
Female Breast	62	.	62	63	58	56	49
Cervix Uteri	50	.	50	50	53	50	46
Uterus (Corpus, NOS)	62	.	62	63	64	58.5	47
Ovary	63	.	63	65	58.5	50	36
Prostate	65	65	.	66	63	65	64
Testes	36	36	.	36	38	*	24.5
Urinary Bladder	71	71	71	71	67	74	70.5
Kidney	63	63	64	64	61	56	49.5
Endocrine	52	56	51	53	52	48.5	39.5
Multiple Myeloma	69	68	70	71	67	70.5	63
Leukemia	66	65	68	67	61	65	30
Brain and Other CNS	58	57	59	59	53	55	32.5
Hodgkin Disease	39	42	38	45	32	*	25
Non-Hodgkin Lymphoma	67	66	67	68	61	63	51
Other Cancers	69	68	69	70	63	63	53

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

*Median ages based on incidence counts less than five are suppressed.

Table 15 (continued): 2010 Cancer Incidence and Mortality Median Age

Mortality

	All	Males	Females	Non-Hispanic Whites	Non-Hispanic Blacks	Non-Hispanic Others	Hispanics
All Cancers	71	70	71	72	67	64	65
Oral Cavity	65	64	70	67	61	64	57
Esophagus	67	65	70	68	63	62	.
Stomach	71	68	78	72	71.5	59	57
Colon and Rectum	71	69	74	72	68.5	63	69.5
Liver	65	63	74	68	60	62.5	67
Gallbladder	68.5	67	71	71	67.5	65	77
Pancreas	71	69	74	72	69	64.5	64
Larynx	68	67	69	70.5	64	60	.
Lung and Bronchus	70	70	71	71	67	66	68
Bone	51	52	45	56	43	19.5	33.5
Soft Tissue	64	66	58	68	57	39	45.5
Melanoma (Skin)	68	70	65.5	68	70	.	40
Female Breast	67	.	67	68	61	57	51
Cervix Uteri	58	.	58	59	57	62	43
Uterus (Corpus, NOS)	70	.	70	70	71	57	61
Ovary	70.5	.	70.5	71	66.5	74	52
Prostate	79	79	.	80	76	80	75
Testes	52	52	.	53	.	.	44
Urinary Bladder	78	77	81	79	72	64	82
Kidney	72	71	75	73	71	74	72
Endocrine	68	64	69	68.5	60	.	70
Multiple Myeloma	74.5	73	76.5	75	71	65	70.5
Leukemia	74	74	73	75	70	59	43
Brain and Other CNS	65	65	65	65	61	53	31
Hodgkin Disease	63.5	60.5	70.5	63.5	72	.	34
Non-Hodgkin Lymphoma	75	72	80	77	65	64.5	63
Other Cancers	72	71	75	74	66	69.5	67

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

*Median ages based on incidence counts less than five are suppressed.

Figure 1a: 1999 – 2010 Colorectal Cancer Incidence Trends by Gender and Race

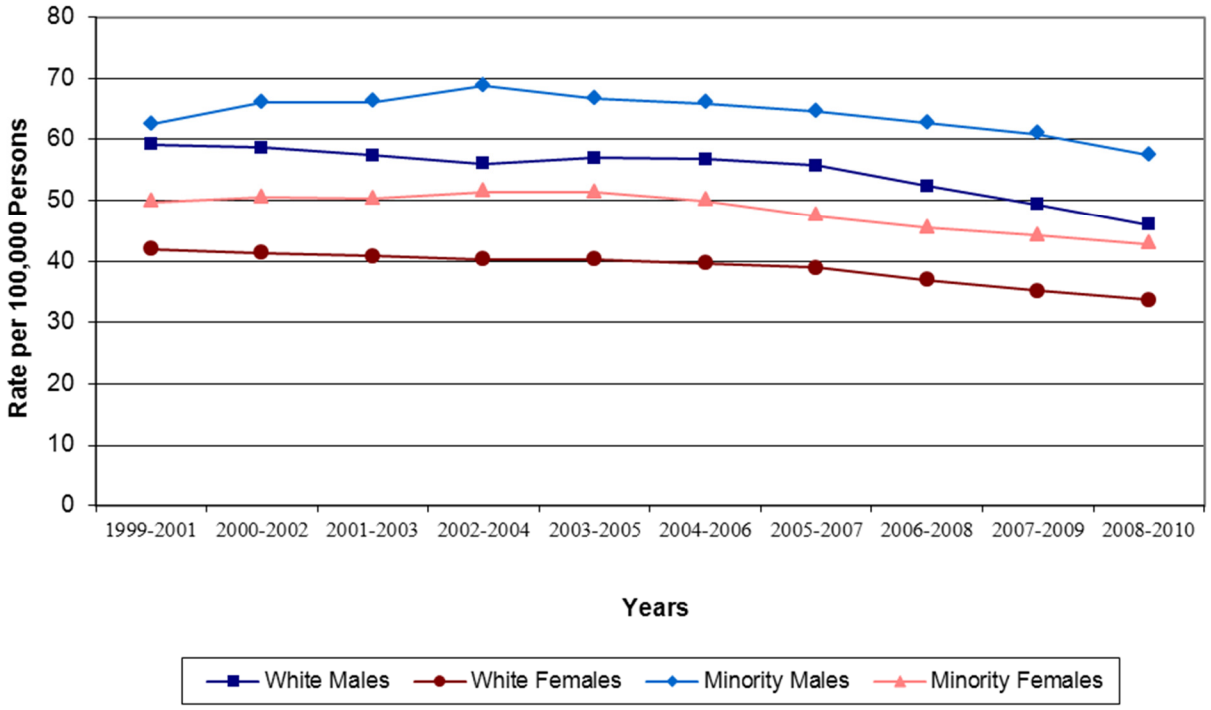


Figure 1b: 1999 – 2010 Colorectal Cancer Mortality Trends by Gender and Race

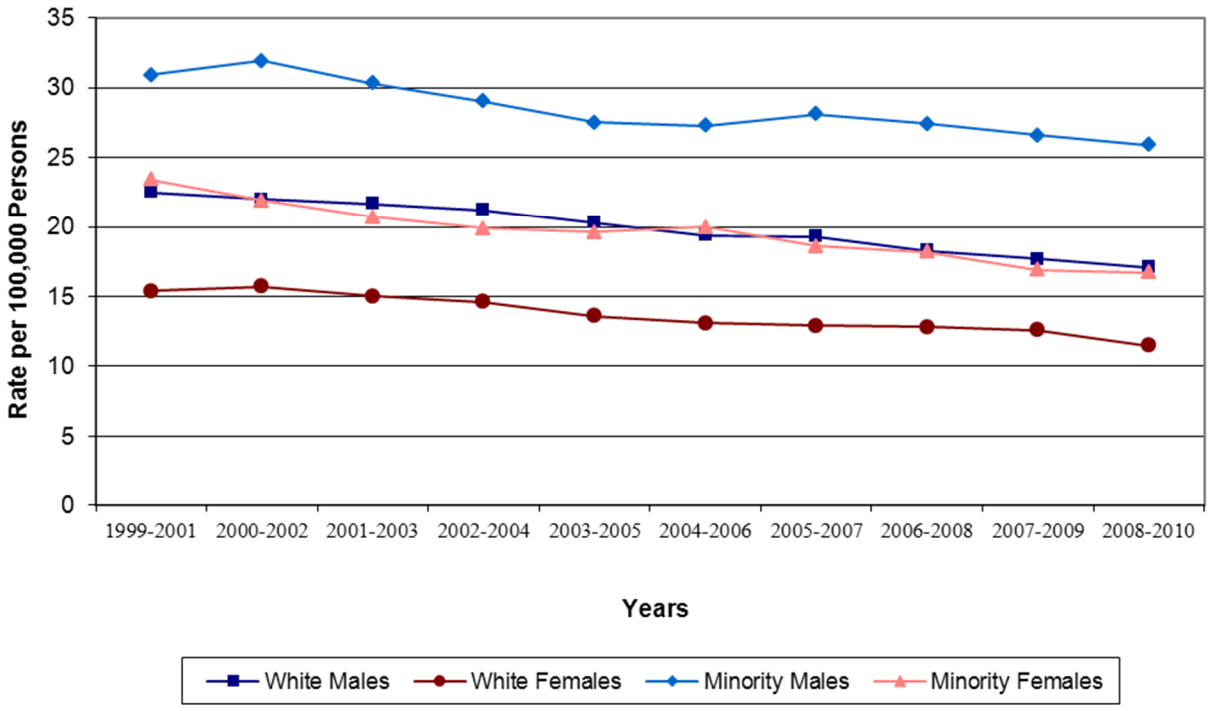


Figure 2a: 1999 – 2010 Lung and Bronchus Cancer Incidence Trends by Gender and Race

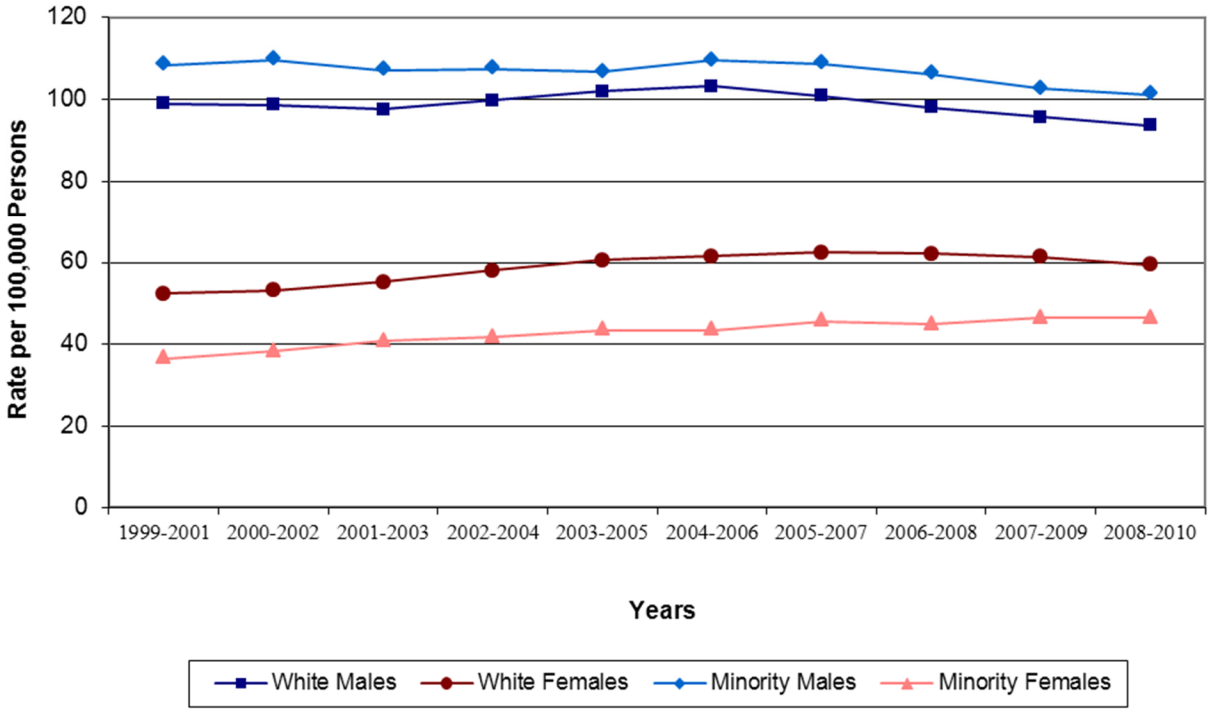


Figure 2b: 1999 – 2010 Lung and Bronchus Cancer Mortality Trends by Gender and Race

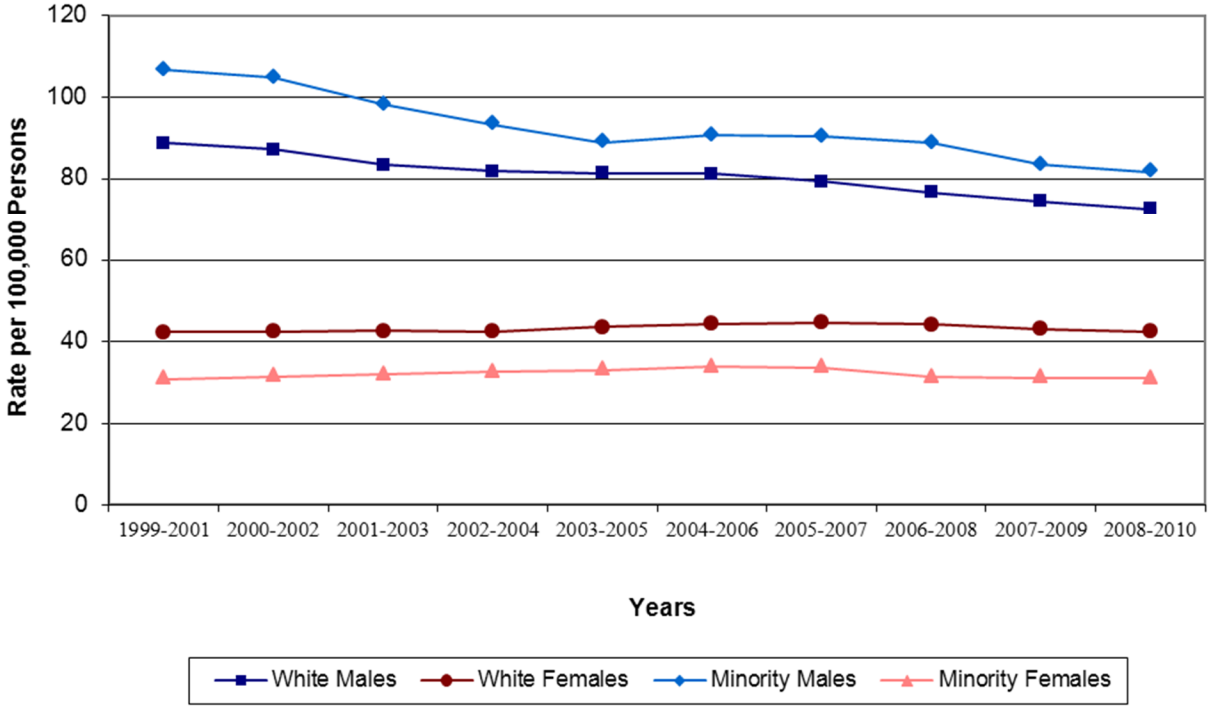


Figure 3a: 1999 – 2010 Female Breast Cancer Incidence Trends by Race

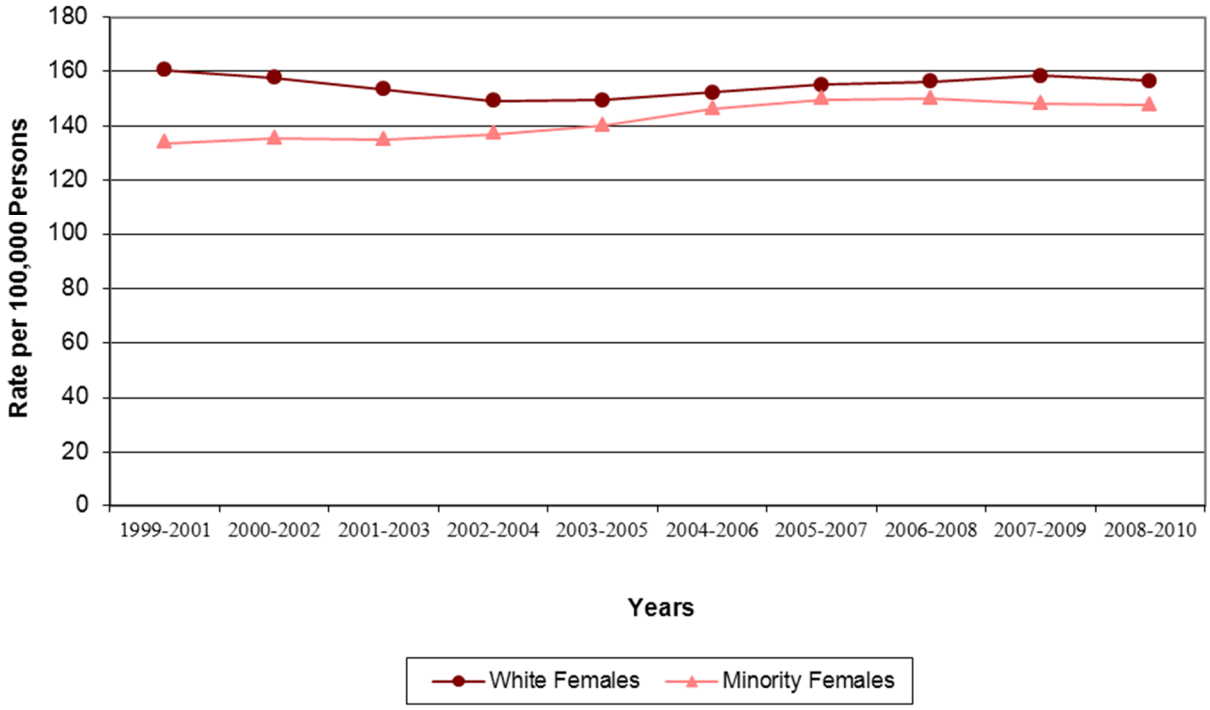


Figure 3b: 1999 – 2010 Female Breast Cancer Mortality Trends by Race

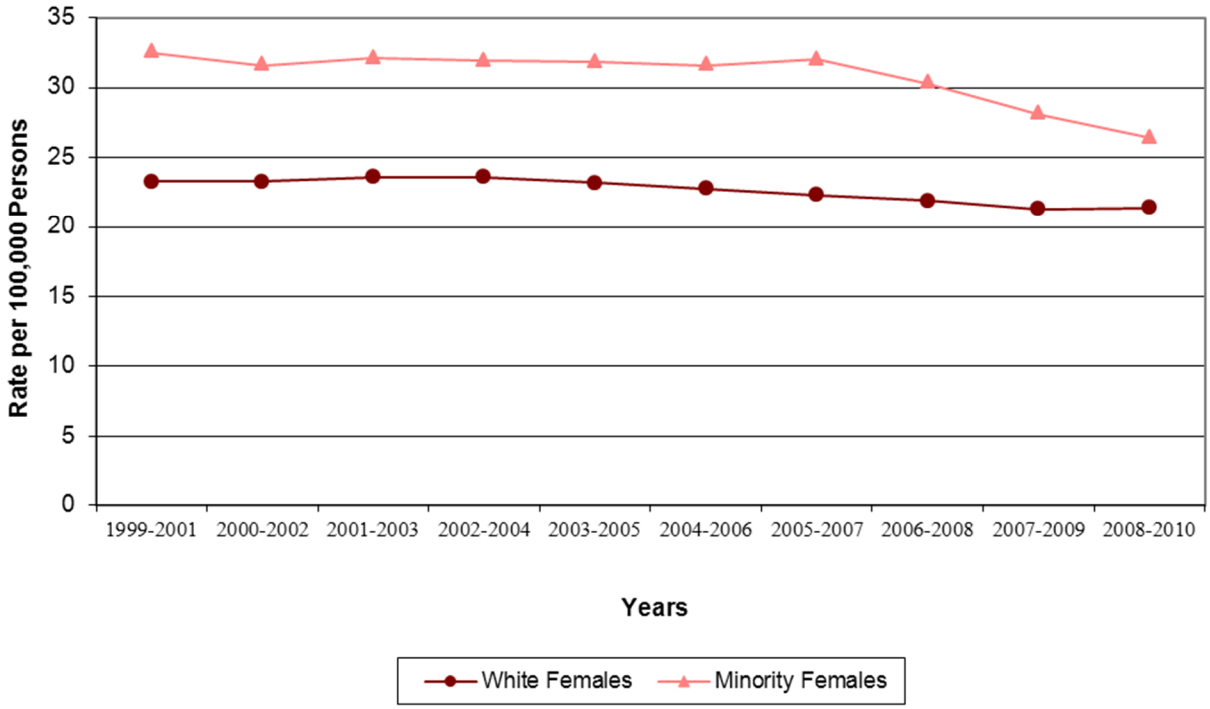


Figure 4a: 1999 – 2010 Prostate Cancer Incidence Trends by Race

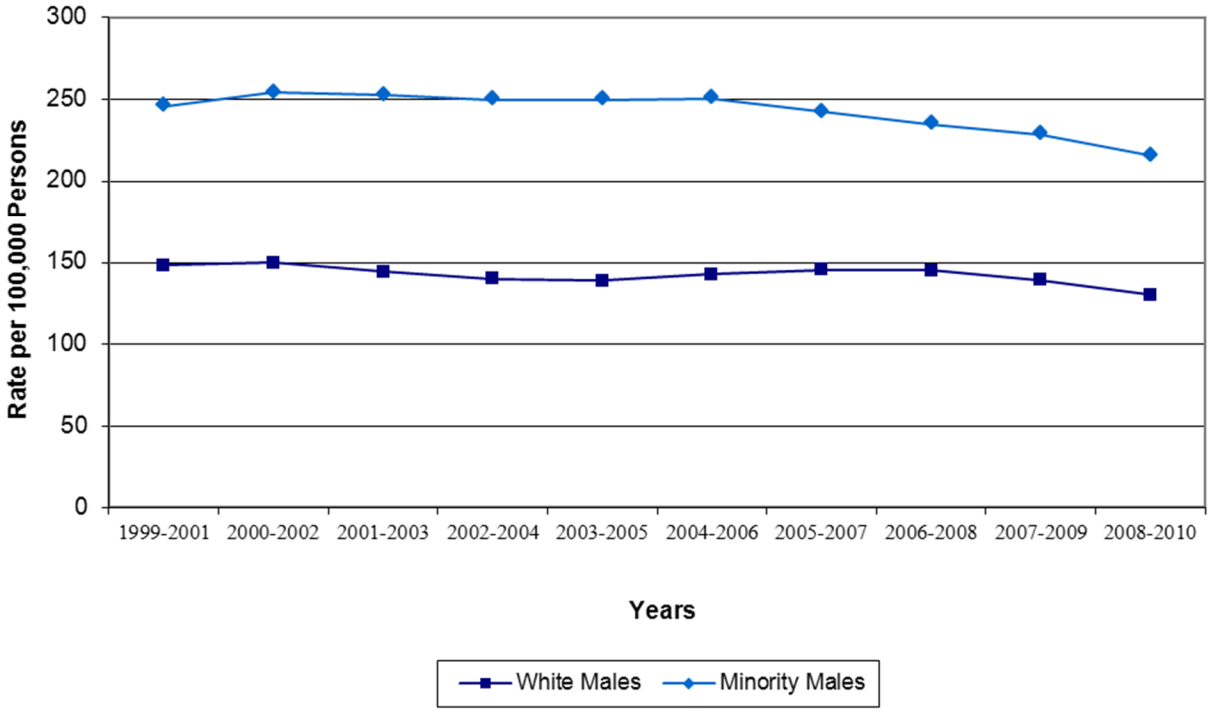


Figure 4b: 1999 – 2010 Prostate Cancer Mortality Trends by Race

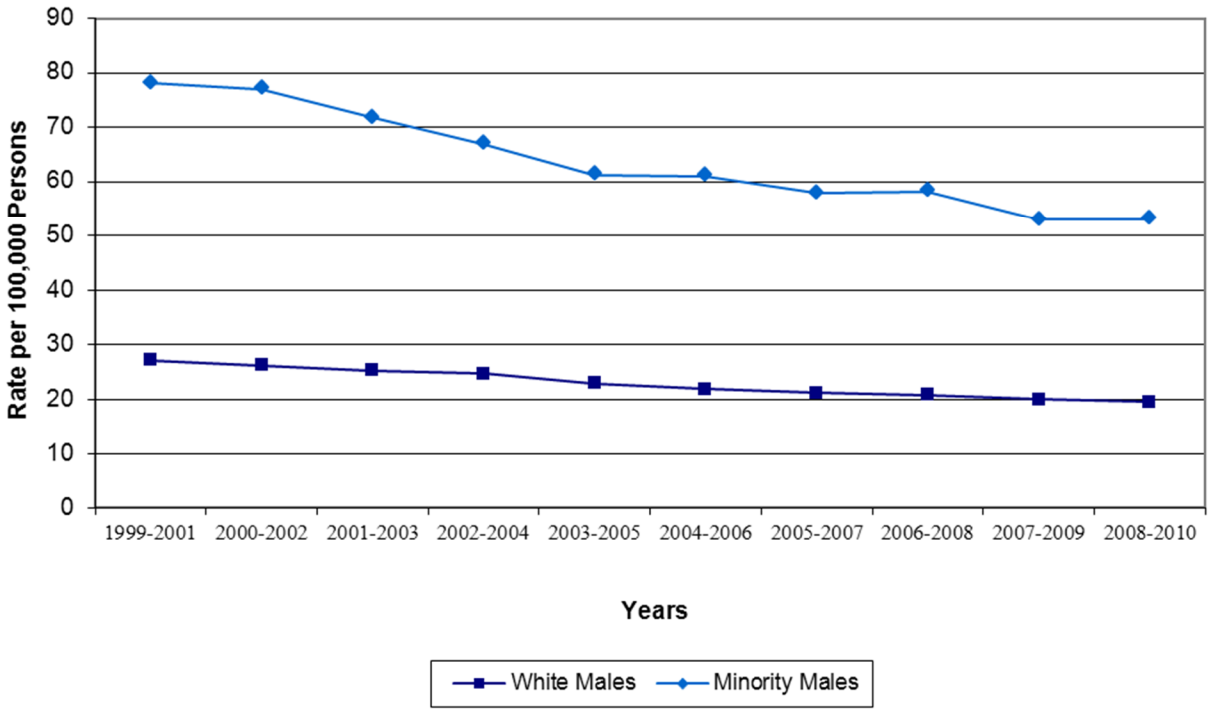


Figure 5: 1999 – 2010 Oral Cavity Cancer Incidence Trends by Gender and Race

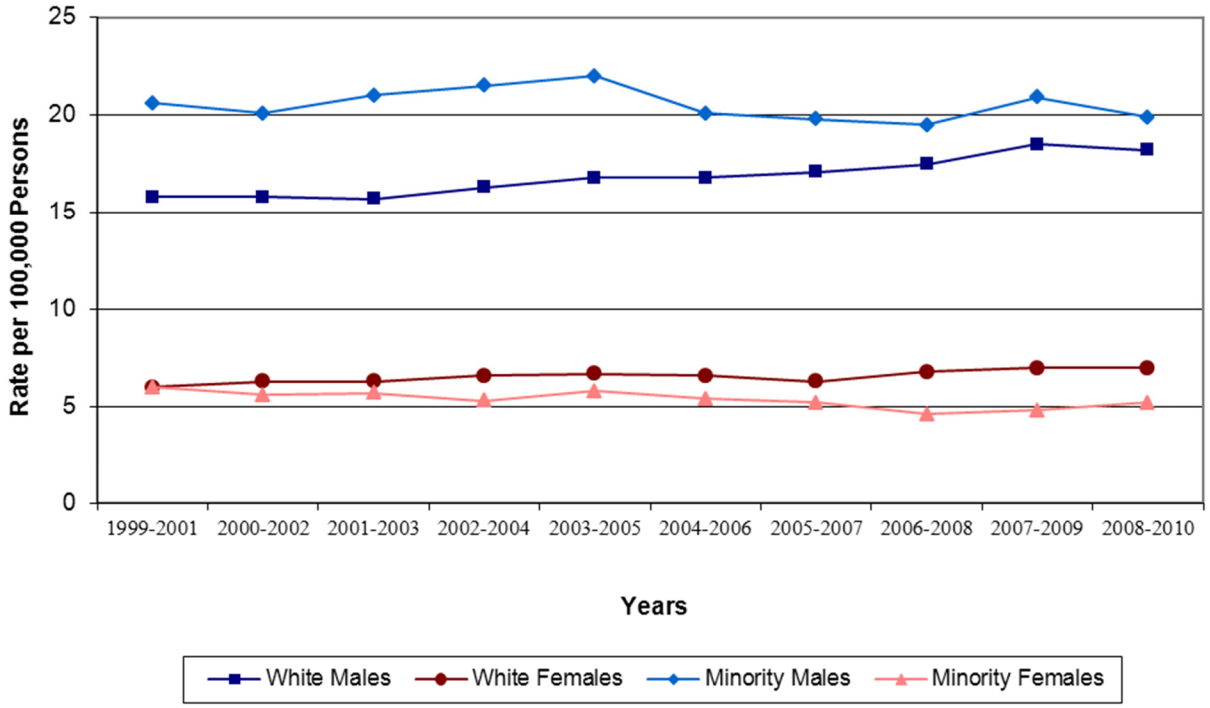


Figure 6: 1999 – 2010 Laryngeal Cancer Incidence Trends by Gender and Race

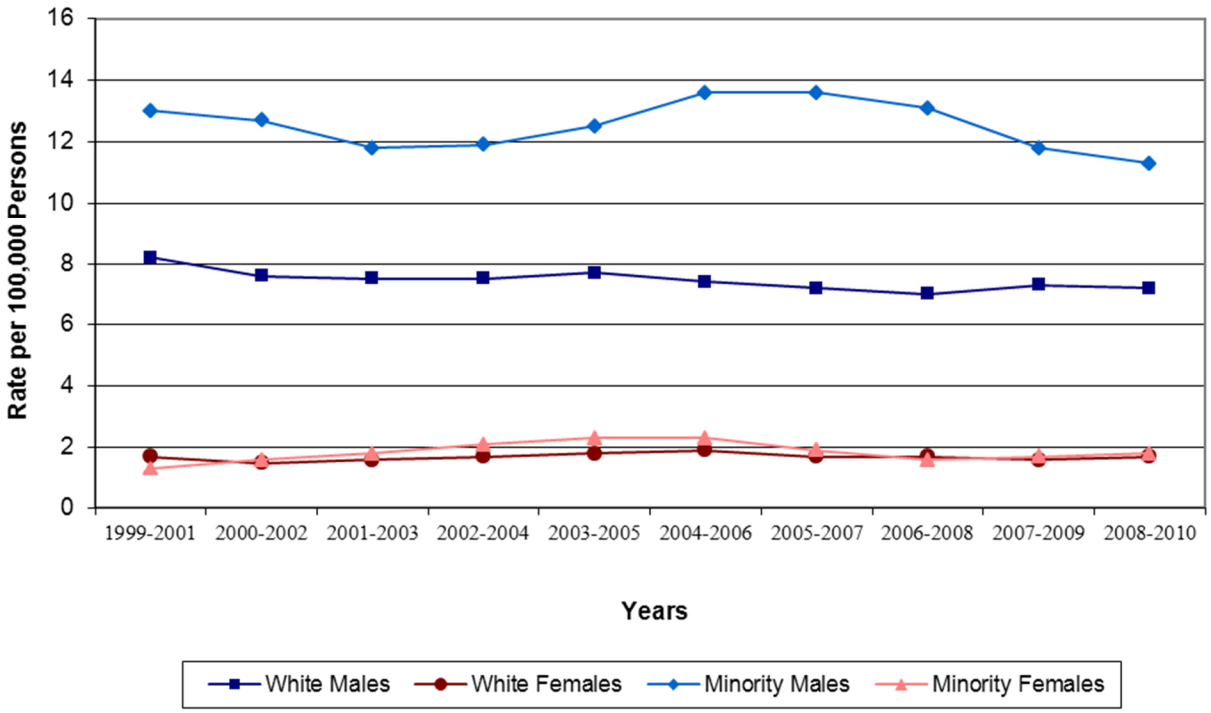


Figure 7: 1999 – 2010 Melanoma Incidence Trends by Gender and Race

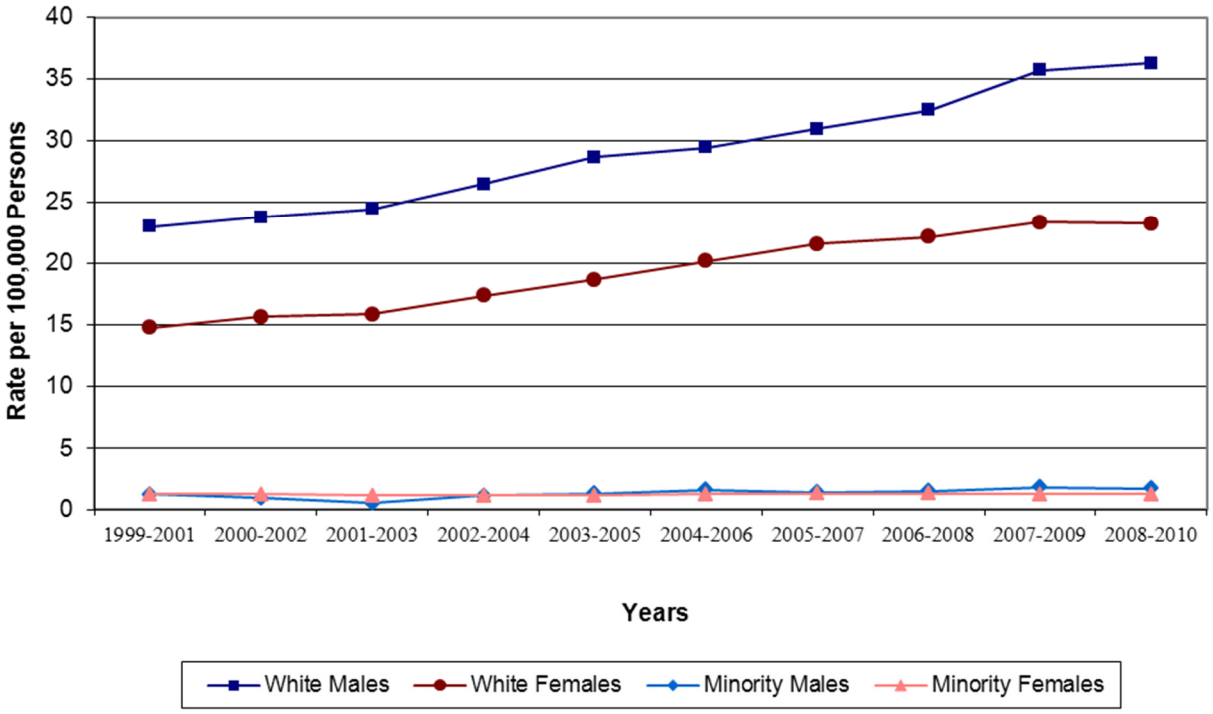


Figure 8: 1999 – 2010 Cervical Cancer Incidence Trends by Race

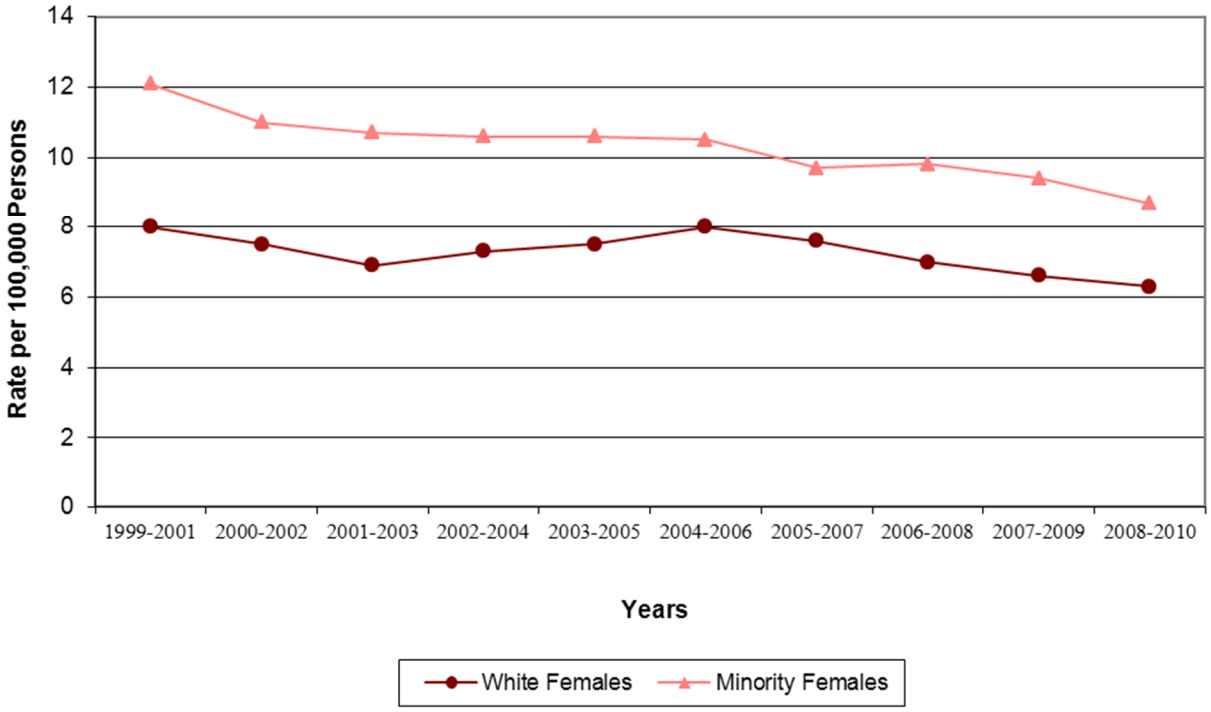


Figure 9: 1999 – 2010 Kidney Cancer Incidence Trends by Gender and Race

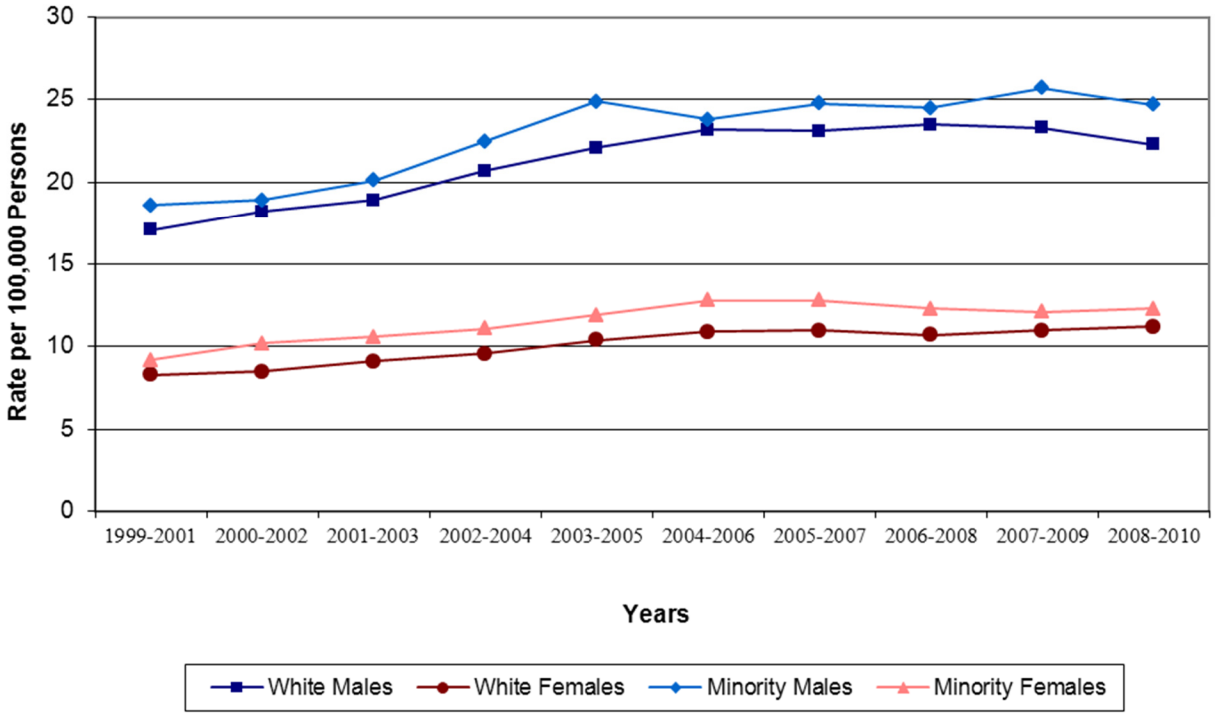


Figure 10: 1999 – 2010 Endocrine Cancer Incidence Trends by Gender and Race

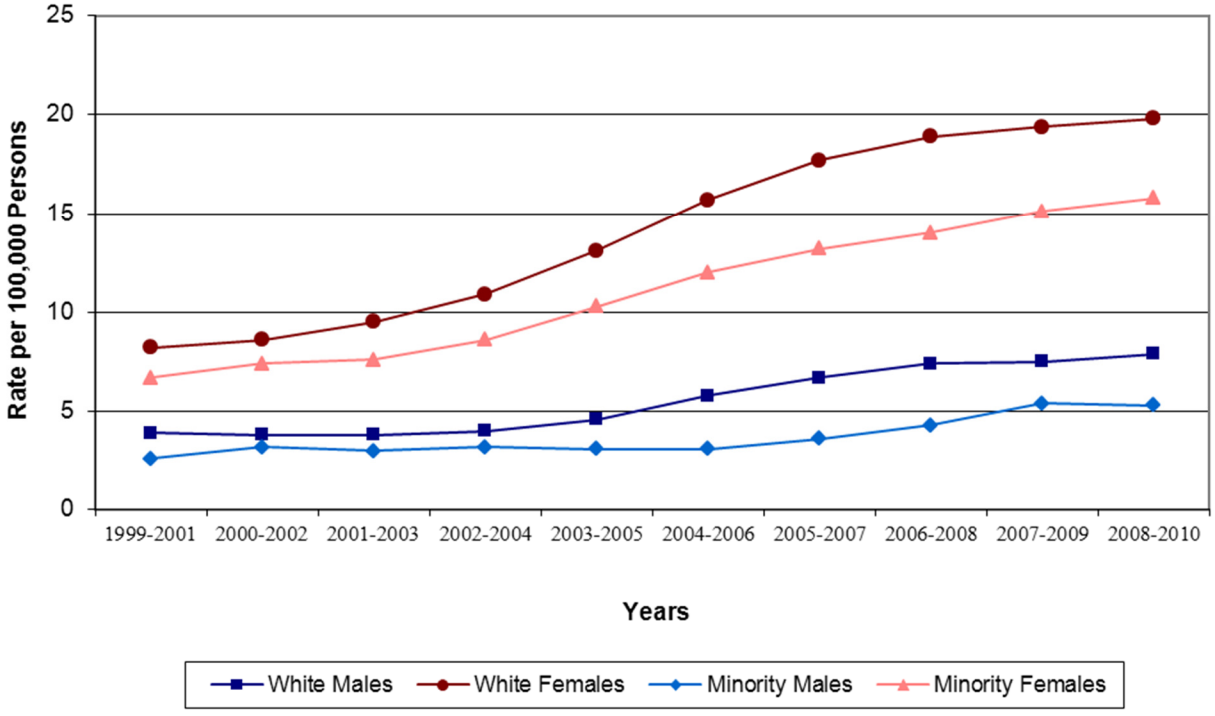


Figure 11: 1999 – 2010 Stomach Cancer Mortality Trends by Gender and Race

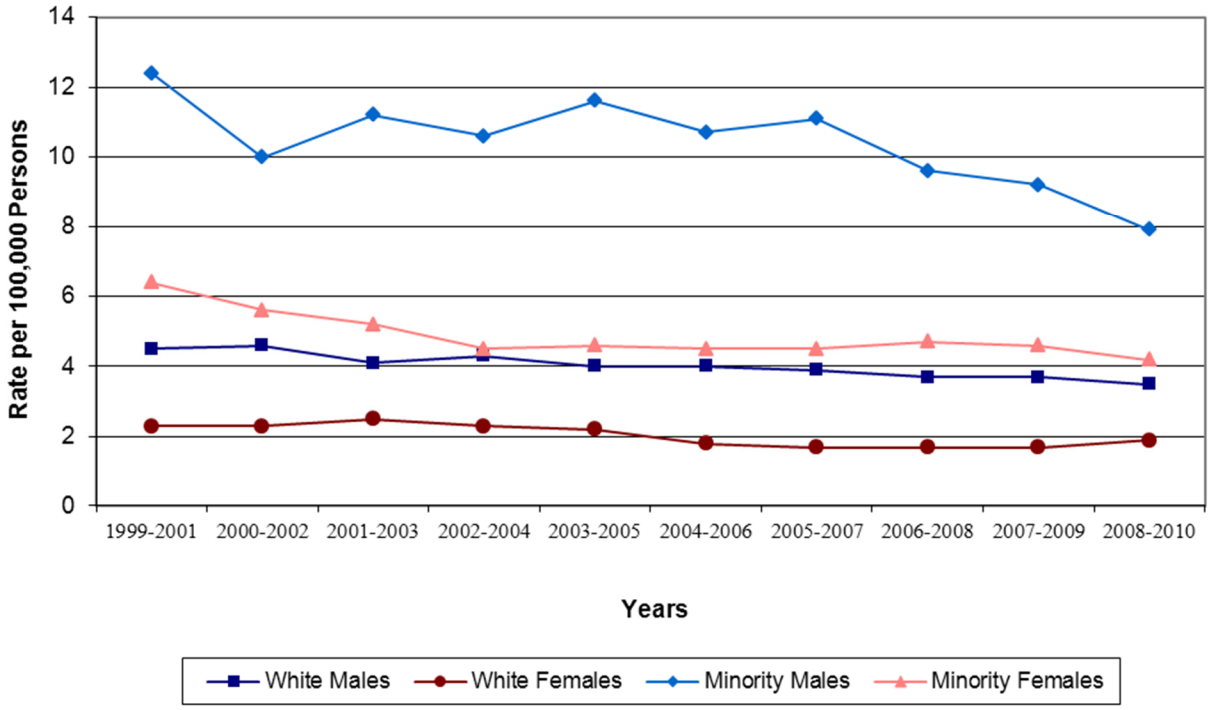


Figure 12: 1999 – 2010 Liver Cancer Mortality Trends by Gender and Race

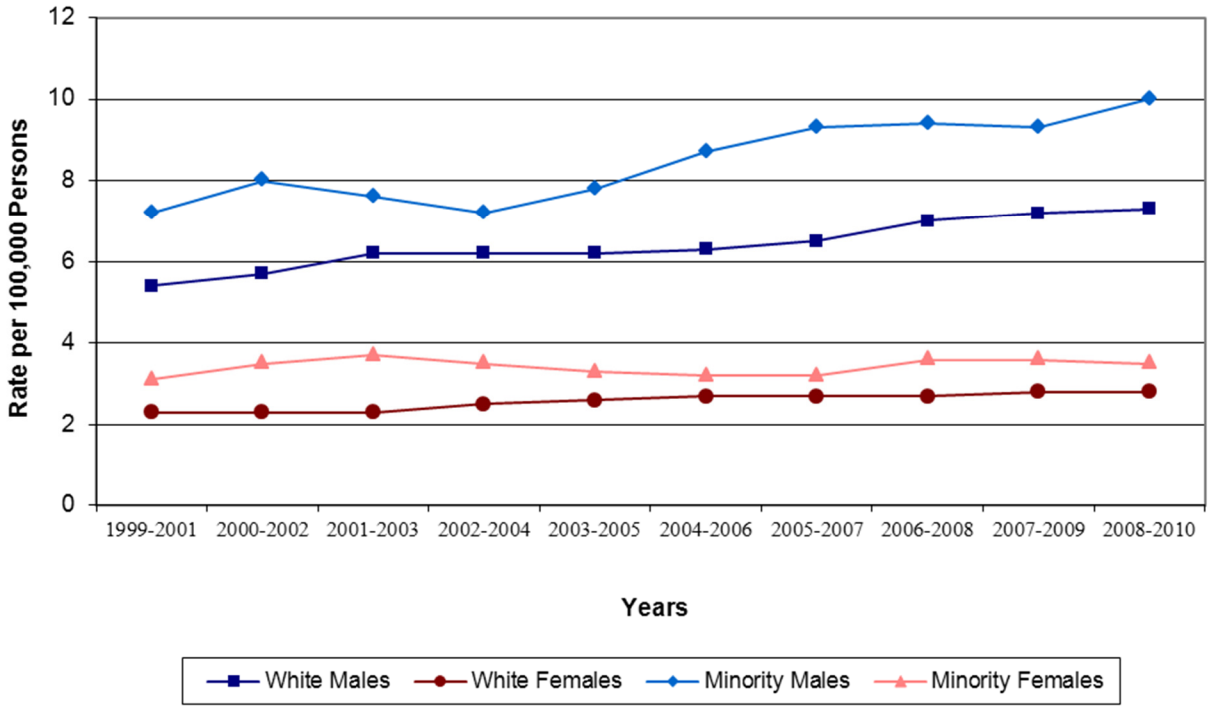


Figure 13: 1999 – 2010 Pancreatic Cancer Mortality Trends by Gender and Race

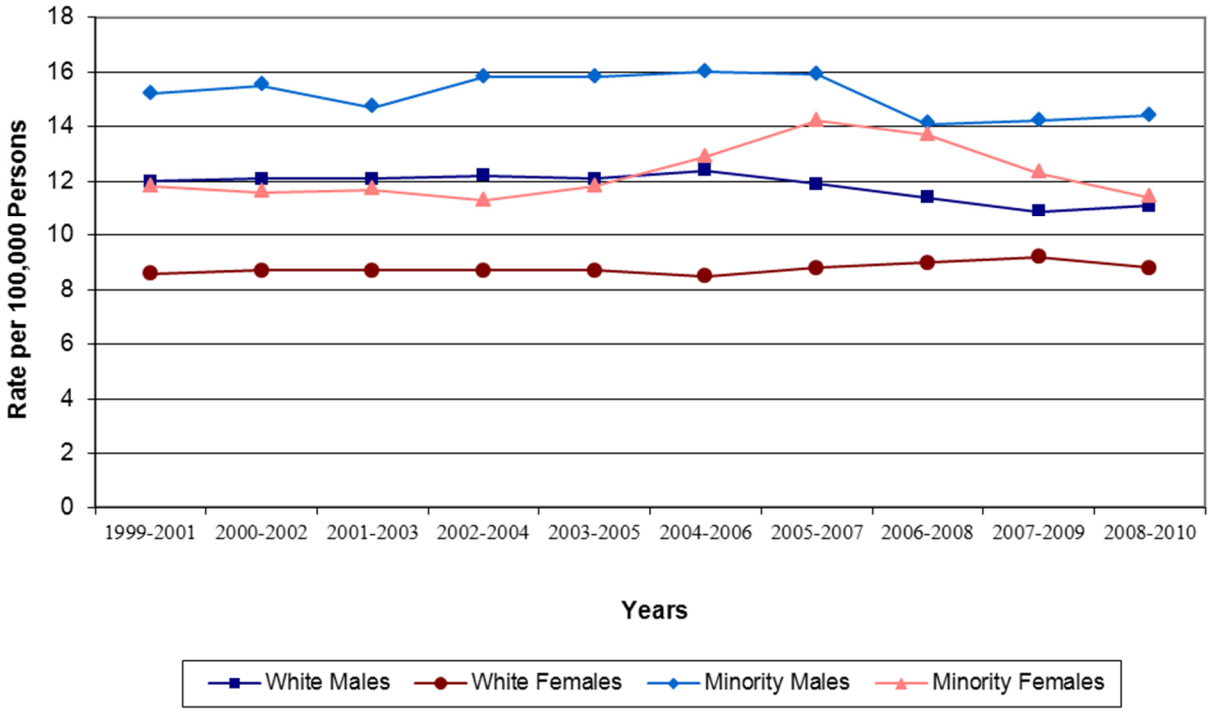


Figure 14: 1999 – 2010 Cervical Cancer Mortality Trends by Race

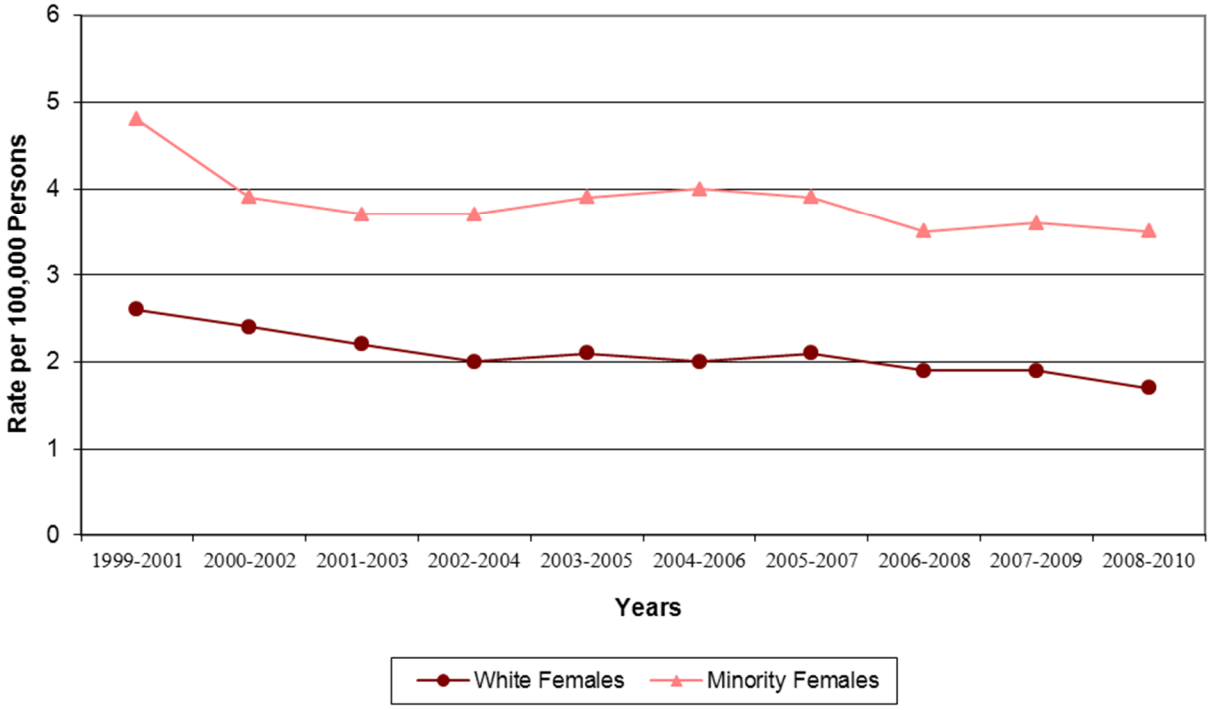
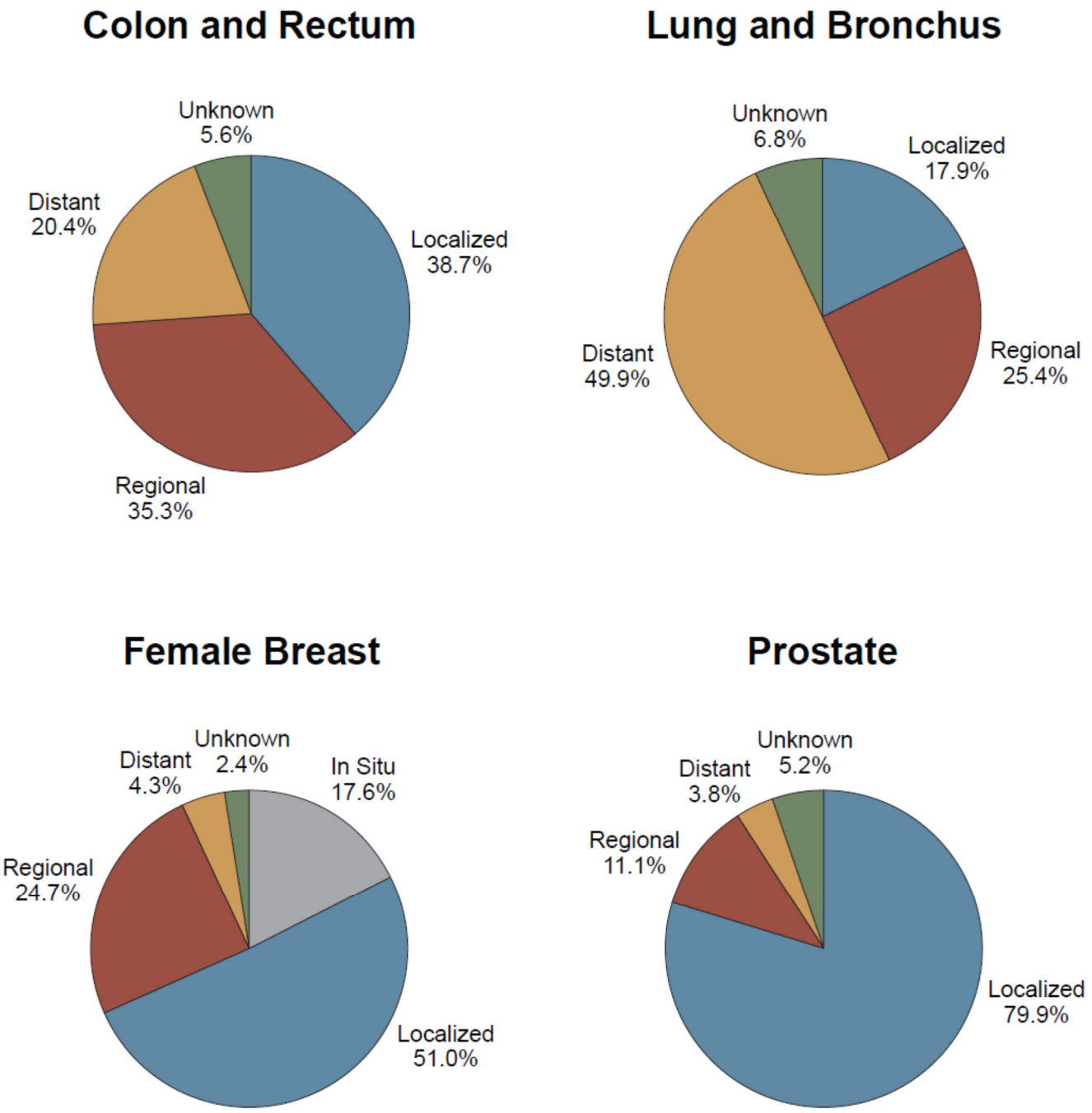


Figure 15: 2010 Percent of Top Four Cancer Cases by Stage



Appendix A: 2010 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
North Carolina	6,985,358	2,151,978	157,331	240,816	9,535,483
Alamance	116,799	29,961	2,164	2,207	151,131
Alexander	34,452	2,207	146	393	37,198
Alleghany	10,852	185	55	63	11,155
Anson	13,116	13,309	206	317	26,948
Ashe	26,822	258	79	122	27,281
Avery	16,908	729	91	69	17,797
Beaufort	34,444	12,669	420	226	47,759
Bertie	7,602	13,443	113	124	21,282
Bladen	21,502	12,623	980	85	35,190
Brunswick	92,766	12,942	974	749	107,431
Buncombe	217,133	16,667	1,379	3,139	238,318
Burke	79,773	6,496	702	3,941	90,912
Cabarrus	143,858	28,871	1,204	4,078	178,011
Caldwell	77,529	4,473	475	552	83,029
Camden	8,390	1,387	40	163	9,980
Carteret	60,912	4,407	392	758	66,469
Caswell	15,305	8,226	114	74	23,719
Catawba	133,798	14,072	808	5,680	154,358
Chatham	52,864	8,947	821	873	63,505
Cherokee	26,353	455	481	155	27,444
Chowan	9,487	5,165	55	86	14,793
Clay	10,430	97	34	26	10,587
Cleveland	75,878	20,991	330	879	98,078
Columbus	37,484	18,221	2,139	254	58,098
Craven	75,807	24,446	679	2,573	103,505
Cumberland	177,086	125,897	6,311	10,137	319,431
Currituck	21,747	1,462	114	224	23,547
Dare	32,488	1,020	166	246	33,920
Davidson	144,060	15,275	1,259	2,284	162,878
Davie	37,876	2,817	250	297	41,240
Duplin	41,607	15,554	832	512	58,505
Durham	144,617	106,466	2,972	13,532	267,587
Edgecombe	23,147	32,911	332	162	56,552
Forsyth	242,034	97,995	3,063	7,578	350,670

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Appendix A (continued): 2010 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
Franklin	42,762	16,875	559	423	60,619
Gaston	169,177	32,827	1,186	2,896	206,086
Gates	7,901	4,185	73	38	12,197
Graham	8,175	28	621	37	8,861
Granville	38,645	20,283	565	423	59,916
Greene	12,580	8,177	479	126	21,362
Guilford	297,803	165,927	3,869	20,807	488,406
Halifax	22,457	29,594	2,201	439	54,691
Harnett	85,140	25,627	2,372	1,539	114,678
Haywood	57,700	725	353	258	59,036
Henderson	100,974	3,723	706	1,337	106,740
Hertford	9,009	15,168	322	170	24,669
Hoke	24,226	16,677	5,222	827	46,952
Hyde	3,856	1,898	38	18	5,810
Iredell	135,104	20,180	930	3,223	159,437
Jackson	34,843	863	4,158	407	40,271
Johnston	138,733	27,071	1,616	1,458	168,878
Jones	6,651	3,385	79	38	10,153
Lee	44,267	12,183	734	682	57,866
Lenoir	34,055	24,658	364	418	59,495
Lincoln	72,755	4,647	312	551	78,265
McDowell	42,351	1,921	305	419	44,996
Macon	32,925	550	210	237	33,922
Madison	20,346	271	59	88	20,764
Martin	13,466	10,829	103	107	24,505
Mecklenburg	568,149	296,658	7,896	46,925	919,628
Mitchell	15,314	84	115	66	15,579
Montgomery	21,621	5,460	226	491	27,798
Moore	74,022	12,339	897	989	88,247
Nash	57,289	36,706	903	942	95,840
New Hanover	166,860	31,404	1,361	3,042	202,667
Northampton	8,851	13,078	121	49	22,099
Onslow	140,201	30,949	1,623	4,999	177,772
Orange	106,237	16,984	952	9,628	133,801
Pamlico	10,277	2,721	84	62	13,144

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Appendix A (continued): 2010 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
Pasquotank	24,003	15,906	205	547	40,661
Pender	41,762	9,622	524	309	52,217
Perquimans	9,929	3,422	43	59	13,453
Person	28,014	10,982	322	146	39,464
Pitt	104,681	59,300	885	3,282	168,148
Polk	19,326	998	91	95	20,510
Randolph	129,603	8,939	1,551	1,659	141,752
Richmond	29,888	14,753	1,461	537	46,639
Robeson	44,929	33,708	54,266	1,265	134,168
Rockingham	74,183	18,392	499	569	93,643
Rowan	112,548	23,468	793	1,619	138,428
Rutherford	59,903	7,325	212	370	67,810
Sampson	42,900	17,996	2,098	437	63,431
Scotland	17,363	14,220	4,273	301	36,157
Stanly	52,134	6,911	206	1,334	60,585
Stokes	44,996	2,068	184	153	47,401
Surry	69,636	3,200	374	463	73,673
Swain	9,648	103	4,156	74	13,981
Transylvania	31,337	1,457	119	177	33,090
Tyrrell	2,560	1,735	30	82	4,407
Union	171,129	24,930	1,365	3,868	201,292
Vance	21,583	23,263	342	234	45,422
Wake	642,646	197,480	8,239	52,628	900,993
Warren	8,505	11,217	1,187	63	20,972
Washington	6,366	6,752	68	42	13,228
Watauga	49,368	1,015	156	540	51,079
Wayne	79,716	40,127	920	1,860	122,623
Wilkes	65,561	3,182	228	369	69,340
Wilson	47,314	32,697	426	797	81,234
Yadkin	36,732	1,322	209	143	38,406
Yancey	17,447	189	105	77	17,818

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Appendix B: 2010 Population Estimates by Age Group and County

	0-19	20-44	45-64	65+	Total
North Carolina	2,558,680	3,235,317	2,507,407	1,234,079	9,535,483
Alamance	40,521	48,722	39,807	22,081	151,131
Alexander	9,314	11,534	10,723	5,627	37,198
Alleghany	2,496	2,949	3,406	2,304	11,155
Anson	6,626	8,995	7,461	3,866	26,948
Ashe	5,843	7,609	8,328	5,501	27,281
Avery	3,564	5,980	5,156	3,097	17,797
Beaufort	11,632	12,938	14,407	8,782	47,759
Bertie	4,947	6,275	6,404	3,656	21,282
Bladen	8,977	10,249	10,483	5,481	35,190
Brunswick	22,067	28,353	33,985	23,026	107,431
Buncombe	54,628	78,326	67,268	38,096	238,318
Burke	23,187	27,134	25,918	14,673	90,912
Cabarrus	52,962	60,123	44,841	20,085	178,011
Caldwell	20,874	25,226	24,113	12,816	83,029
Camden	2,786	2,993	2,918	1,283	9,980
Carteret	13,935	18,540	21,335	12,659	66,469
Caswell	5,411	6,912	7,641	3,755	23,719
Catawba	40,731	48,683	43,171	21,773	154,358
Chatham	15,046	17,896	18,932	11,631	63,505
Cherokee	5,842	6,760	8,558	6,284	27,444
Chowan	3,617	3,809	4,459	2,908	14,793
Clay	2,179	2,518	3,392	2,498	10,587
Cleveland	25,997	29,509	27,895	14,677	98,078
Columbus	14,994	17,919	16,355	8,830	58,098
Craven	26,983	34,771	25,941	15,810	103,505
Cumberland	95,574	121,251	72,406	30,200	319,431
Currituck	6,111	7,027	7,368	3,041	23,547
Dare	7,381	10,230	11,142	5,167	33,920
Davidson	42,705	50,399	46,386	23,388	162,878
Davie	10,697	11,420	12,294	6,829	41,240
Duplin	16,340	18,400	15,470	8,295	58,505
Durham	69,272	109,950	62,248	26,117	267,587
Edgecombe	15,343	16,738	16,367	8,104	56,552
Forsyth	96,217	116,520	92,422	45,511	350,670

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Appendix B (continued): 2010 Population Estimates by Age Group and County

	0-19	20-44	45-64	65+	Total
Franklin	16,480	19,191	17,270	7,678	60,619
Gaston	54,715	67,375	56,702	27,294	206,086
Gates	3,200	3,441	3,725	1,831	12,197
Graham	2,118	2,403	2,598	1,742	8,861
Granville	15,025	20,072	17,378	7,441	59,916
Greene	5,464	7,304	5,929	2,665	21,362
Guilford	131,964	171,016	125,303	60,123	488,406
Halifax	14,092	15,622	16,141	8,836	54,691
Harnett	35,470	40,715	26,546	11,947	114,678
Haywood	12,804	16,130	17,686	12,416	59,036
Henderson	23,930	28,913	30,032	23,865	106,740
Hertford	6,203	7,360	7,208	3,898	24,669
Hoke	15,291	18,040	10,138	3,483	46,952
Hyde	1,181	2,015	1,739	875	5,810
Iredell	44,653	50,380	43,959	20,445	159,437
Jackson	9,780	14,161	10,246	6,084	40,271
Johnston	51,021	57,733	42,865	17,259	168,878
Jones	2,446	2,738	3,213	1,756	10,153
Lee	16,284	18,639	15,006	7,937	57,866
Lenoir	15,847	16,782	17,352	9,514	59,495
Lincoln	20,356	24,430	23,118	10,361	78,265
McDowell	10,798	13,842	12,979	7,377	44,996
Macon	7,301	8,423	10,129	8,069	33,922
Madison	4,829	6,021	6,248	3,666	20,764
Martin	6,058	6,512	7,638	4,297	24,505
Mecklenburg	257,743	363,987	216,785	81,113	919,628
Mitchell	3,343	4,297	4,679	3,260	15,579
Montgomery	7,368	8,253	7,813	4,364	27,798
Moore	20,880	23,295	24,086	19,986	88,247
Nash	25,429	29,214	27,804	13,393	95,840
New Hanover	47,302	74,849	52,424	28,092	202,667
Northampton	5,126	5,780	6,857	4,336	22,099
Onslow	53,255	80,173	31,082	13,262	177,772
Orange	35,413	51,353	34,146	12,889	133,801
Pamlico	2,625	3,344	4,318	2,857	13,144

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Appendix B (continued): 2010 Population Estimates by Age Group and County

	0-19	20-44	45-64	65+	Total
Pasquotank	10,876	13,671	10,601	5,513	40,661
Pender	13,184	15,756	15,391	7,886	52,217
Perquimans	3,045	3,429	4,092	2,887	13,453
Person	10,104	11,506	11,861	5,993	39,464
Pitt	47,144	66,307	38,078	16,619	168,148
Polk	4,362	4,758	6,397	4,993	20,510
Randolph	38,192	44,438	39,173	19,949	141,752
Richmond	12,732	14,518	12,698	6,691	46,639
Robeson	40,889	44,538	33,663	15,078	134,168
Rockingham	22,964	27,576	27,932	15,171	93,643
Rowan	36,703	43,818	37,914	19,993	138,428
Rutherford	16,931	19,366	19,787	11,726	67,810
Sampson	17,822	19,811	16,754	9,044	63,431
Scotland	10,140	10,961	10,142	4,914	36,157
Stanly	15,485	18,625	16,968	9,507	60,585
Stokes	11,647	13,681	14,498	7,575	47,401
Surry	19,027	21,747	20,649	12,250	73,673
Swain	3,659	4,014	3,987	2,321	13,981
Transylvania	6,784	8,147	9,620	8,539	33,090
Tyrrell	910	1,494	1,261	742	4,407
Union	66,066	65,066	50,694	19,466	201,292
Vance	12,902	13,750	12,349	6,421	45,422
Wake	259,522	345,378	219,544	76,549	900,993
Warren	4,744	5,762	6,505	3,961	20,972
Washington	3,382	3,419	4,013	2,414	13,228
Watauga	11,873	21,376	11,501	6,329	51,079
Wayne	33,872	40,504	32,169	16,078	122,623
Wilkes	17,059	20,052	20,451	11,778	69,340
Wilson	22,276	25,143	22,298	11,517	81,234
Yadkin	9,861	11,392	10,912	6,241	38,406
Yancey	3,930	4,853	5,363	3,672	17,818

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Appendix C: 2010 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
North Carolina	3,440,751	3,544,607	1,204,741	1,345,384	9,535,483
Alamance	55,928	60,871	15,962	18,370	151,131
Alexander	17,200	17,252	1,624	1,122	37,198
Alleghany	5,361	5,491	171	132	11,155
Anson	6,806	6,310	7,209	6,623	26,948
Ashe	13,249	13,573	240	219	27,281
Avery	8,937	7,971	753	136	17,797
Beaufort	16,880	17,564	6,128	7,187	47,759
Bertie	3,817	3,785	6,717	6,963	21,282
Bladen	10,569	10,933	6,318	7,370	35,190
Brunswick	45,579	47,187	7,081	7,584	107,431
Buncombe	104,488	112,645	10,282	10,903	238,318
Burke	39,241	40,532	6,227	4,912	90,912
Cabarrus	70,824	73,034	16,120	18,033	178,011
Caldwell	38,119	39,410	2,729	2,771	83,029
Camden	4,229	4,161	777	813	9,980
Carteret	30,047	30,865	2,782	2,775	66,469
Caswell	7,793	7,512	4,281	4,133	23,719
Catawba	65,470	68,328	10,133	10,427	154,358
Chatham	25,680	27,184	4,974	5,667	63,505
Cherokee	12,787	13,566	554	537	27,444
Chowan	4,609	4,878	2,421	2,885	14,793
Clay	5,147	5,283	76	81	10,587
Cleveland	36,994	38,884	10,325	11,875	98,078
Columbus	18,426	19,058	10,327	10,287	58,098
Craven	38,201	37,606	13,291	14,407	103,505
Cumberland	88,176	88,910	66,152	76,193	319,431
Currituck	10,827	10,920	842	958	23,547
Dare	16,256	16,232	700	732	33,920
Davidson	70,841	73,219	8,956	9,862	162,878
Davie	18,559	19,317	1,577	1,787	41,240
Duplin	20,828	20,779	7,930	8,968	58,505
Durham	71,076	73,541	56,580	66,390	267,587
Edgecombe	11,097	12,050	15,142	18,263	56,552
Forsyth	116,622	125,412	49,797	58,839	350,670

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Appendix C (continued): 2010 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
Franklin	21,470	21,292	8,696	9,161	60,619
Gaston	82,460	86,717	17,258	19,651	206,086
Gates	3,936	3,965	2,026	2,270	12,197
Graham	4,026	4,149	341	345	8,861
Granville	20,357	18,288	11,658	9,613	59,916
Greene	6,716	5,864	4,741	4,041	21,362
Guilford	144,237	153,566	88,246	102,357	488,406
Halifax	10,892	11,565	15,245	16,989	54,691
Harnett	42,008	43,132	14,191	15,347	114,678
Haywood	27,833	29,867	669	667	59,036
Henderson	48,754	52,220	2,806	2,960	106,740
Hertford	4,634	4,375	7,428	8,232	24,669
Hoke	12,093	12,133	10,785	11,941	46,952
Hyde	2,045	1,811	1,181	773	5,810
Iredell	66,929	68,175	11,562	12,771	159,437
Jackson	17,289	17,554	2,754	2,674	40,271
Johnston	68,586	70,147	14,564	15,581	168,878
Jones	3,282	3,369	1,601	1,901	10,153
Lee	21,874	22,393	6,390	7,209	57,866
Lenoir	16,680	17,375	11,717	13,723	59,495
Lincoln	36,127	36,628	2,686	2,824	78,265
McDowell	21,027	21,324	1,490	1,155	44,996
Macon	15,932	16,993	563	434	33,922
Madison	10,035	10,311	238	180	20,764
Martin	6,462	7,004	4,971	6,068	24,505
Mecklenburg	281,318	286,831	163,563	187,916	919,628
Mitchell	7,465	7,849	135	130	15,579
Montgomery	10,605	11,016	2,853	3,324	27,798
Moore	35,752	38,270	6,424	7,801	88,247
Nash	28,180	29,109	18,095	20,456	95,840
New Hanover	81,439	85,421	16,830	18,977	202,667
Northampton	4,473	4,378	6,241	7,007	22,099
Onslow	76,143	64,058	19,206	18,365	177,772
Orange	51,100	55,137	12,854	14,710	133,801
Pamlico	5,166	5,111	1,544	1,323	13,144

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

Appendix C (continued): 2010 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
Pasquotank	11,925	12,078	8,044	8,614	40,661
Pender	21,004	20,758	5,130	5,325	52,217
Perquimans	4,870	5,059	1,576	1,948	13,453
Person	13,712	14,302	5,425	6,025	39,464
Pitt	50,519	54,162	28,841	34,626	168,148
Polk	9,246	10,080	579	605	20,510
Randolph	63,850	65,753	5,988	6,161	141,752
Richmond	14,803	15,085	8,154	8,597	46,639
Robeson	22,321	22,608	42,922	46,317	134,168
Rockingham	36,023	38,160	9,143	10,317	93,643
Rowan	55,712	56,836	12,651	13,229	138,428
Rutherford	28,971	30,932	3,810	4,097	67,810
Sampson	21,337	21,563	9,771	10,760	63,431
Scotland	8,429	8,934	9,037	9,757	36,157
Stanly	25,826	26,308	4,285	4,166	60,585
Stokes	21,918	23,078	1,206	1,199	47,401
Surry	33,987	35,649	1,984	2,053	73,673
Swain	4,717	4,931	2,095	2,238	13,981
Transylvania	15,067	16,270	906	847	33,090
Tyrrell	1,317	1,243	1,117	730	4,407
Union	84,823	86,306	14,543	15,620	201,292
Vance	10,449	11,134	10,870	12,969	45,422
Wake	317,720	324,926	121,072	137,275	900,993
Warren	4,363	4,142	6,234	6,233	20,972
Washington	3,097	3,269	3,124	3,738	13,228
Watauga	24,711	24,657	925	786	51,079
Wayne	39,969	39,747	19,987	22,920	122,623
Wilkes	32,276	33,285	1,988	1,791	69,340
Wilson	23,200	24,114	15,584	18,336	81,234
Yadkin	18,056	18,676	821	853	38,406
Yancey	8,545	8,902	199	172	17,818

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2011.

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